

# THE NATION'S SCHOOLS



**NOVEMBER 1953**

*Color in classrooms (an 8 page portfolio) • Obsolescent buildings • Students help prepare school budget • Are senior trips worth while? • Improvements in retirement plans • Reorganization through state control*

THE MAGAZINE OF BETTER SCHOOL ADMINISTRATION

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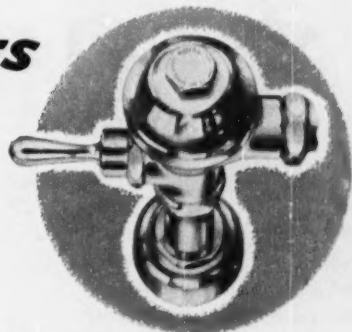
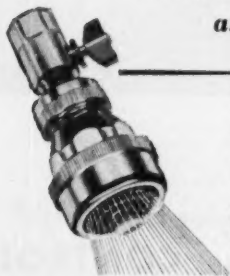
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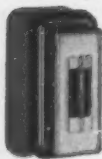
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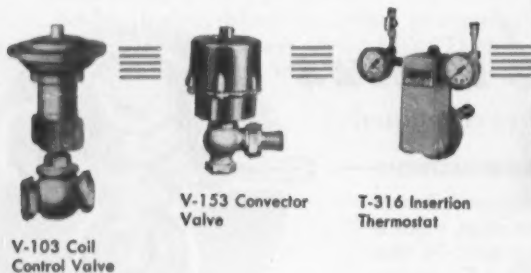
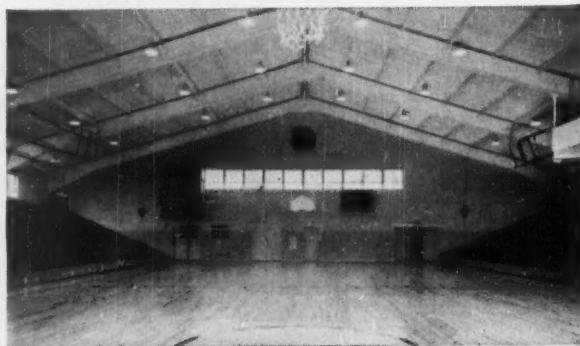
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THE MAGAZINE OF BETTER SCHOOL ADMINISTRATION

**NOVEMBER 1953**

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# AMONG THE AUTHORS

While on sabbatical leave from his position as assistant principal of Newton High School, Newtonville, Mass., LEO BARRY participated in a survey of the school buildings in Boston (p. 49) made by students in Harvard's new program in educational administration. After teaching English from 1935 to 1940 at Danvers High School, Danvers, Mass., and from 1941 to 1943 at Newton High School, Mr. Barry joined the navy. In 1947 he returned to Newtonville as administrative assistant at the high school, and in 1951 he accepted his present position. He was editor of *Newton School Age*, quarterly bulletin of the public schools, from 1947 to 1952, and director of radio for the schools from 1947 to 1951. From 1944 to 1946, as a navy lieutenant, Mr. Barry served as communications watch officer with the Seventh Fleet and later editor of the Philippines edition of the *Navy News*. In the latter capacity he covered war crimes trials in Manila.



Leo Barry



William B. Southerlin

Some of South Carolina's current efforts to improve its schools will be described in a series of three articles, the first of which appears on page 58 of this issue. Author of the series is WILLIAM B. SOUTHERLIN, supervisor of the schoolhouse planning section of the state educational finance commission. Before accepting this position in 1948, Mr. Southerlin was a high school teacher, principal of an elementary school, and a superintendent of schools.

As a Montanan born and bred, DUANE R. TAFT was in an excellent position to cooperate with faculty members and citizens in planning a high school to meet the special needs of Sunburst, Mont. (p. 65). Mr. Taft has been superintendent in that community since 1943. Before that he was a teacher at Lima, Neihart and Harlem, Mont., and superintendent and athletics coach at Fort Shaw, Mont. The new school helped Mr. Taft get a degree, for his master's thesis was entitled "An Analysis of the Procedures Prior to and During the Building of the Senior High School for the Core Program at Sunburst, Montana."

A former school administrator, CHARLES A. QUATTLEBAUM has been employed for a number of years by the United States Congress. His job is to study educational issues of national importance and prepare analytic reports that will provide informational bases for legislative decision. As principal specialist in education on the staff of the legislative reference service, Library of Congress, he

also serves as a consultant to committees and individual members of Congress interested in legislation affecting education. Mr. Quattlebaum is the author of numerous congressional documents and articles in reference books and educational journals as well as of other published works. His article, "Federal Aid to Education Is Generally a By-Product of Other Federal Activities," appears on page 70 of this issue.

Gary, Ind., never underestimates the power of a woman, especially when she's a custodial worker in the public schools (p. 96). Assistant superintendent in charge of business administration for the Gary schools (and so the women custodians' boss) is RALPH L. MULLER. Before Mr. Muller accepted this position in 1942, he was a science teacher at Marlette and Zeeland and assistant superintendent at Ferndale, all in the state of Michigan. He is a past president of the Indiana Association of Superintendents and Business Officers.



Ralph L. Muller



John H. Nicholson

Superintendents have long been preaching the necessity of democracy in administration; now, says JOHN H. NICHOLSON, the public has in many places advanced to the point of demanding that they practice it. For puzzled superintendents Mr. Nicholson offers some advice (p. 81). He is director of instruction for the Kansas State Department of Education and chairman of the Kansas Council for Improvement of School Administration, affiliated with the Midwest Administration Center, C.P.E.A. In the past he was a teacher, principal of high schools at Noractur, Atwood and Hutchinson, Kan., and supervising principal for the public schools of Briarcliff Manor, N.Y.

JOHN A. RAMSEYER is one of the professors who has joined hands with superintendents in an effort to improve university programs for the training of administrators (p. 74). He is professor of education at Ohio State University and director of the School-Community Development Study there. Also Mr. Ramseyer is the director of C.P.E.A. activities in Ohio. In the past he has taught in high schools at Sulphur Springs, Genoa and Dover, Ohio. He was a teacher at and later director of the University School at Ohio State from 1938 to 1951.



John A. Ramseyer

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# MEGASCOPE

a brief, analytical look at several features  
in this issue by CALVIN GRIEDER, professor of  
school administration, University of Colorado



**No Longer Guesswork.** Most readers of *The NATION'S SCHOOLS* have seen during their professional careers a radical change from school-room brown, buff and gray to more colorful and charming schemes of decoration. Administrators and school plant planners certainly have become color-conscious. However, little has been really known about the effects of color on pupil achievement, attitudes and physical well-being. The four-color portfolio in this issue, with text by the editor (following page 64), convincingly demonstrates that the use of color in schools is finally being taken out of the realm of guesswork. Sound research in the difficult field of color has lagged lamentably behind research in the closely allied and equally difficult field of lighting. This splendid portfolio indicates that a good beginning has been made and that color engineering opens up vistas undreamed of a few years ago.

**The Public Is Ahead Again.** Professional pollsters may look with dismay at the procedures followed in the Michigan survey of public opinion on the schools (p. 61). Crosby and Proud point out well, however, that even with the most cautious and conservative interpretation of responses, certain definite patterns do emerge. The generally favorable attitude of Michigan citizens toward their schools should be both encouraging and stimulating to educators and boards of education. Other states may profit from this example by setting up a state policies commission and also by soliciting opinion and suggestions at the grass roots. One must be prepared to receive responses that may not be the ones desired. Yet when a fairly good sample is procured and when people have the chance to say what they really believe, the results are almost sure to be constructive in their total effect. I am often amazed to see how far boards are in advance

of their administrators and how far the public is ahead of both boards and administrators.

**"Never Underestimate . . ."** R. L. Muller presents a strong case (p. 96) for the natural superiority of women as custodians, based on the experience of the schools at Gary, Ind. The fact that such excellent service by women custodians commands a lower rate of pay than similar work by men is uncomfortable. Similar differentials exist in many salary schedules for teachers. As long as the factors of supply and demand are operative, this practice will prevail, I imagine.

**Getting Out of a Jam.** One of the enigmas of public school administration is why and how large city school systems get into such awful jams on their school facilities. Puzzling also is why they don't more often ask universities for the expert help that the latter can usually give. The Boston School Plant Survey, which in great detail brings up to date one part of the Strayer report of a decade ago, is an outstanding example of the kind of assistance a university can give. Leo Barry's summary (p. 49) shows that Boston is in a jam, for sure, but it also shows that there is a way out for the city.

Heroic measures by the school committee and the people will have to be taken to catch up on years of relative inaction, as in some other large cities. But the administration and the board do have a series of concrete proposals to begin with—a guide for thinking and planning in a straight line, so to speak, and getting away from going around in circles.

**Yes and No.** From John H. Nicholson's brief discussion of the evolution of democratic school administration (p. 81) one gets a panoramic sweep from past through present to future.

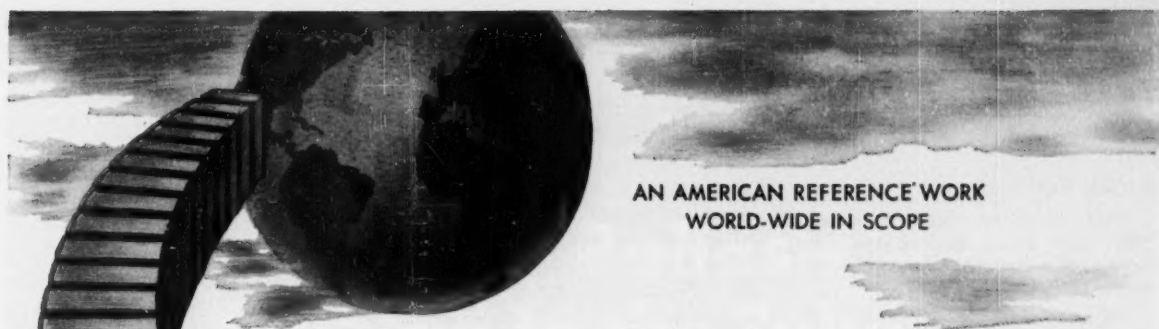
With his identification of "hopeful signs" and suggestions for democratizing administration I cannot take issue. However, I cannot agree that of all social institutions the locally controlled school system is the easiest to operate. It is one of the most complex, although its complexity seems to remain largely unrecognized by educators and laymen alike.

I wonder too if the people have "seized upon the schools" because they can realize the "great promise of co-operative democratic action" or for some other reasons. Thought-provoking ideas in Nicholson's article, nevertheless.

**Strong Stand for Reform.** The phenomenal progress made in the last two years by South Carolina in improving educational administration is related by W. B. Southerlin in the first article of a series (p. 58). Without question one of the essential factors that account for this progress is the stand taken by the governor. In too many states there is no governor or other top level political leader who will come out uncompromisingly in support of fundamental and far-reaching measures for educational reform. The establishment of a special commission, as in South Carolina, to do the job may not be approved everywhere, but for a major overhaul a special board or commission may well be more effective than the existing state board or department of education.

**From Sunburst, New Light on Planning.** Small communities have an unusual opportunity, it seems to me, for a laboratory approach to school plant planning and construction. The needs of the community can be studied intensively, and the objectives of the educational program which the single plant must provide for can be sharply defined. The new high school at Sunburst, Mont., written up by Taft and Bordeleau (p. 65), reflects this kind of planning. At a little more than average cost, a real community center—not just a school—has been built which will enrich the lives of adults as well as children for many years to come.





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## Questions and Answers

### Facing Reality

Does emotional harm to children result from programs involving drills for air raids and discussions of atomic warfare?

The answer to this important question cannot be made without some qualification. It is obvious that emotional harm can result from improper

handling of a problem such as described or of any of a thousand different necessary adjustments to modern living that teachers must take up with the children they educate. By a faulty approach a teacher could readily create unhealthy attitudes and abnormal fear reactions to situations involving the dangers in using an automobile, pos-

sible harm from lightning, or (and this is very common) diseases that are transmissible by germs. In other words, it is not the subject matter that determines the harm to the child but the mode of presentation.

If we can agree that the need for air raid drills, discussions of atomic warfare and the like are present-day problems that must be faced realistically (and who cannot agree to that?) they merit the attention of teachers and the pupils they guide. A matter-of-fact approach to the understanding of these realities is not likely to cause emotional harm to children any more than a discussion of any other modern problem.

On the other hand, continued harping on these potential threats beyond the point of useful understanding could well initiate unnecessary anxiety reactions on the part of children, especially those who are most sensitive to such things.

Most important of all is the teacher's own balance in viewing these matters. The teacher who shows abnormal fear about atomic warfare, air raids (or germ-carrying flies, sexual problems, physical well-being, or what have you) is likely to transmit these fears to the children and perhaps to cause some harm.

I can only conclude that realities of life, whether they be atomic bomb threats or paying the grocer, must be faced straightforwardly but without exaggeration.—ROBERT F. TOPP, dean of the graduate school, National College of Education, Evanston, Ill.

### Special Budget Hearings

Is it advisable to hold special budget hearings for representatives of interested civic and business groups in the community?

Too many times budget hearings as required by law come entirely too late for the schools to develop necessary public understanding as to what kind of educational program the budget represents. For the same reason the usual legal budget hearing often becomes a perfunctory exercise, since the time element usually does not permit any major overhaul or drastic alteration in the budget estimates even when such action may be desirable.

Some states have attempted to meet this problem by legislative changes in the budget calendar in order to provide more adequate time for proper review and modification.

In other instances, however, local



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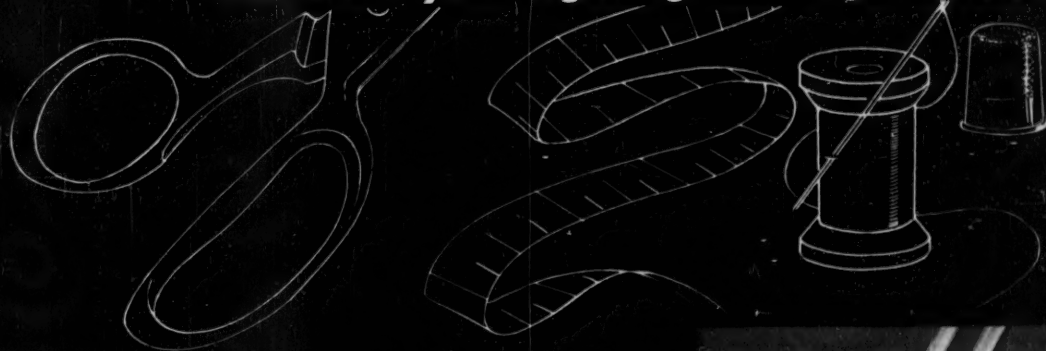
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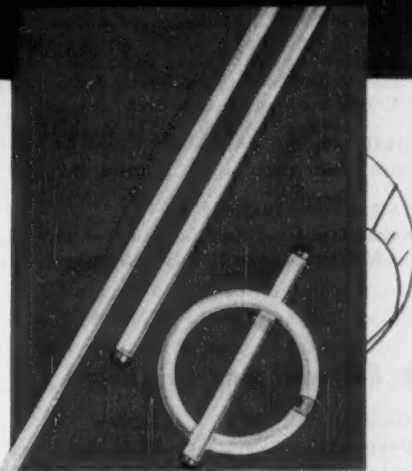
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school districts have held special hearings on budget and related financial problems well in advance of the legally required final hearing.

There are two basic criteria which such hearings should meet. First, as the budget is the financial reflection of the educational program of the district, proper consideration should be given to the nature of the program the budget is to be used for. This may involve a series of meetings and publications for necessary explanation, interpretation and clarification of education plans. Second, care should be exercised to ensure that all important organizations or elements in the community are afforded an opportunity to participate. Otherwise, the tendency is to cater to pressure groups, with too much emphasis given to dollars and too little to the program the dollars are to be invested in. If these two criteria are met, special meetings are all to the good, but the term "hearing" may not be the best term to use in describing the nature and purpose of such meetings.

The usual concept of a hearing is that those who are for or against a proposal or some of its aspects may have opportunity to present their arguments pro and con. This is all right and in keeping with democratic principles. However, it would be far more effective if all of these representatives could come together earlier and perhaps more often to consider the community's problems, needs and aspirations and what the schools should do about them. With this kind of background, the necessary financing of a desirable educational program becomes more a matter of joint planning than of emotion and pressure.

It should be kept in mind that the schools belong to and should serve the entire community and for that reason no one segment of the community should be allowed to exert undue influence in determining either the instructional or the financial policies.

Some school districts make effective use of lay advisory committees or citizens' councils in studying and planning program and budget requirements. Other districts hold a series of open meetings throughout the year to which interested citizens are invited. Whatever is done, greater public participation in and understanding of the school program and its budgetary needs should result.—C. C. TRILLINGHAM, superintendent of schools, Los Angeles County, California.



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# Roving Reporter

**Sixth Graders Try Their Hand at Sculpturing, Learn to Appreciate Roman and Greek Artists • For American Education Week Living Models Display Teaching Methods • Miniature Schoolhouses Show Educational Progress**

WHAT THE CITIZENS in Chattanooga, Tenn., really like is children.

That's what the schools there have decided because of the popularity of their "goldfish bowl" displays during American Education Week in 1951 and 1952.

From the hours of 11 a.m. to 1 p.m., in the front window of one of the city's largest furniture stores, real little boys and girls participated, unrehearsed and uninhibited, in actual classroom experiences. The youngsters were heard, over a public address system, as well as seen.

Traffic was stopped. Onlookers were six and seven deep, jostling for a place from which they could see. And they weren't all papas and mammas either.

The first year this display was planned for only two days. The second year it was given for the entire week in two furniture stores, the one in which it was given in 1951 and a second which had requested the schools to plan such a window for it.

Negro and white primary school children alternated in both windows. A full dress drill on the three R's was the only rehearsed feature of the display. The schools wanted to show all phases of primary teaching: experiences in social living, such as pupil cooperation and initiative, sharing, respect for the individual, and the acceptance of responsibility; how schools teach health through daily living; the phonetic approach to spelling, and appreciation of art and nature.

On the opening day one side of a corner window showed a traditional class with old-fashioned equipment and rigid discipline; the other side showed children, relaxed and casually grouped, learning informally.

Many hours of planning were required, of course. Equipment was transported by a committee known as the "Tote and Fetch Boys." Another committee assumed full responsibility for the engineering of the sound sys-

tem. P.T.A. mothers brought the children to the stores and then stood by in case of emergency. Local radio stations carried daily on-the-spot broadcasts from the display windows, and the local press daily printed photographs of the windows, news stories, and feature articles.

In fact, eventually all of Chattanooga seemed to be participating in American Education Week.

WHEN YOUNGSTERS are introduced to the cultures of the Greeks and Romans, they usually are fascinated with the mythical heroes of Greece and the soldiers of Rome. But how can the teacher excite a similar interest in the less spectacular aspects of ancient culture—the ideals of beauty portrayed in Greek sculpture and poetry, for example?

An answer was found in a sixth grade group at Westwood Elementary School, Cincinnati, according to Marie Weatherby Endres, assistant principal. The youngsters vied with each



other to give the most realistic dramatizations of the stories of Athena and Arachne and Ulysses and the Cyclops and of scenes from the Trojan war, thus learning to respect the Greeks' abilities as story tellers. Then they decided to try for themselves some modeling and sculpturing, which gave them an appreciation of Hellenic work in these arts.

A stick of modeling clay was given to each boy and girl who wished to try working with it. The teacher, herself a novice in this field, talked with

the children about the contour of the face and how the nose and cheeks might be built up to give true shape. Everyone looked carefully at the one fine statue in the building. It was decided through group discussion that each should study the face of a classmate and use that as a guide.

The youngsters did not attempt to copy Greek masterpieces; they agreed that the simple modeling or carving of a head or bust would present a sufficiently difficult problem for most of them. No tools were used except small, sharp pointed sticks. Although several used soap, the children using modeling clay had the advantage of being able to rework many times their "sculptures" until they achieved the desired results.

Of the class of 32 boys and girls, 21 made models. Two preferred to compose prayers to Athena in verse, while nine formed committees to paint backgrounds for dramatizations.

The problems met and the satisfaction derived gave the youngsters a realization of the skill of the ancient artists and the worth of their contributions to the world, Miss Endres believes.

EDUCATIONAL PROGRESS was shown in a display of schoolhouse models made by members of the Josephine Fassett F.T.A. Club of Clay High School (Oregon Township), Toledo, Ohio, to celebrate the state's 150th anniversary.

The exhibit consisted of a log school, a little red schoolhouse, and the architect's model of a new school building. The boys did the construction work, while the girls prepared the furnishings. The little red schoolhouse contained authentic replicas of a pot-bellied stove, old-fashioned desks, and clay dolls dressed in clothes of the correct period.

The models were displayed in store windows as well as at the school.



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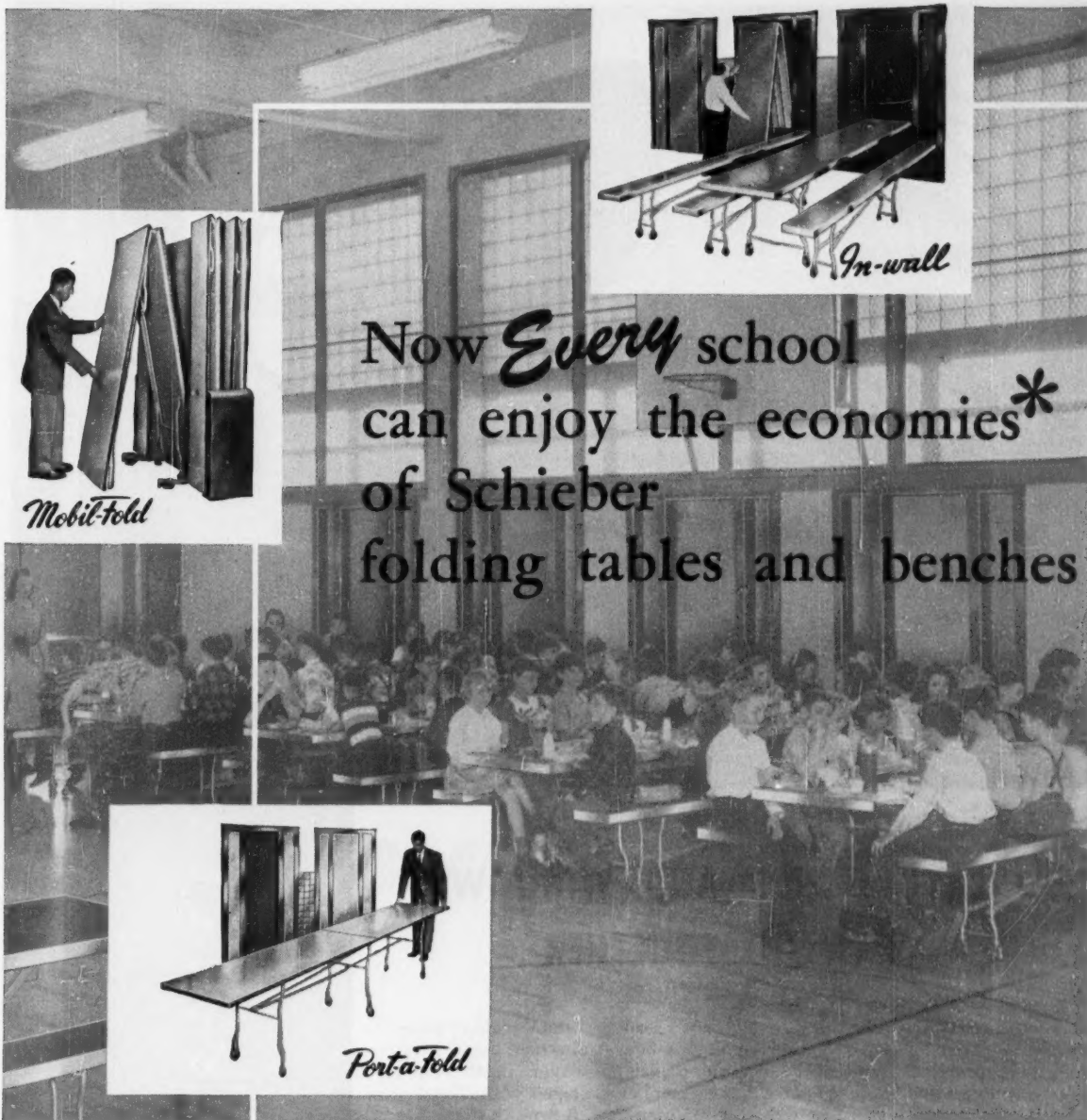
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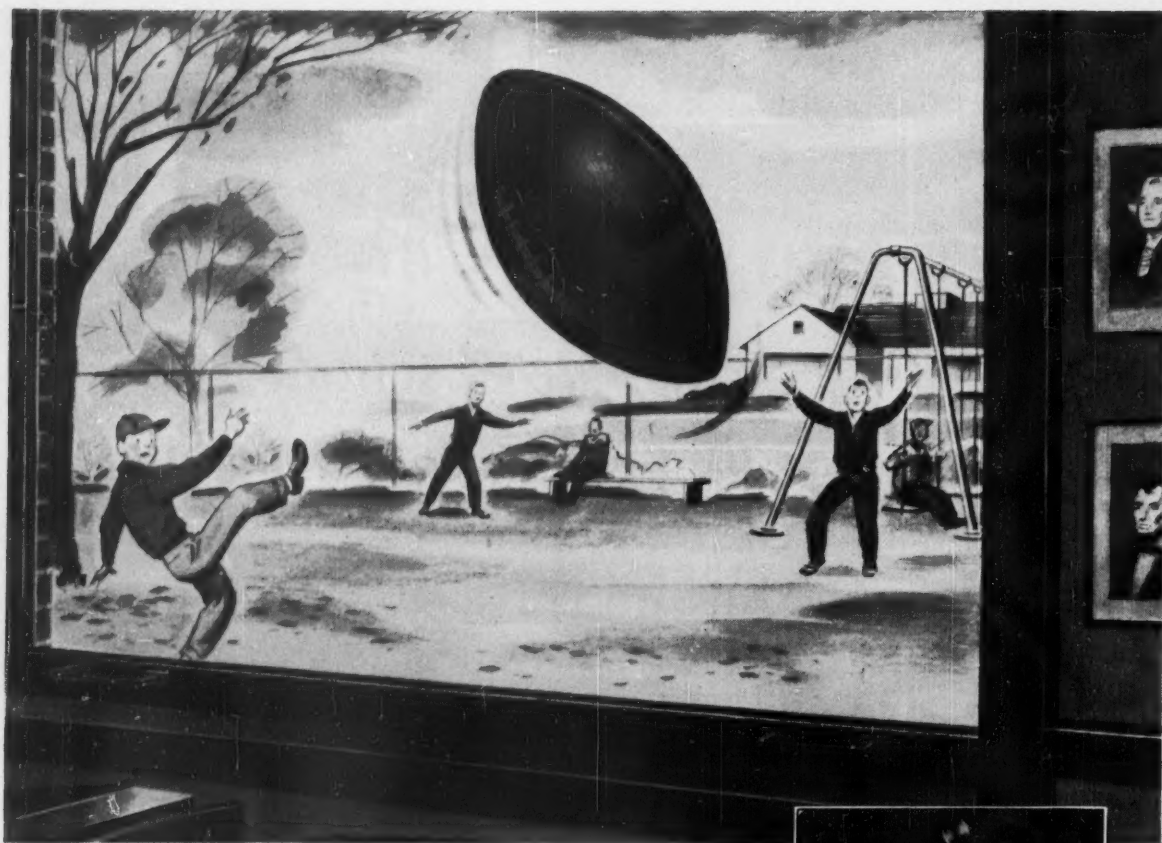
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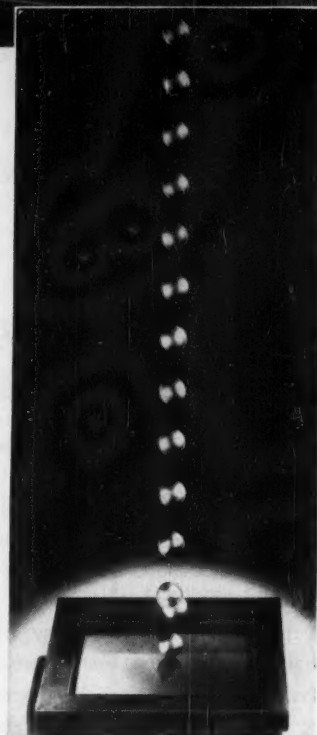
*Tuf-flex* for school windows is  $\frac{1}{4}$ "-thick plate glass, heat tempered during manufacture to withstand greater impact.

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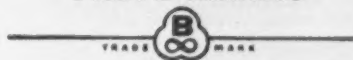
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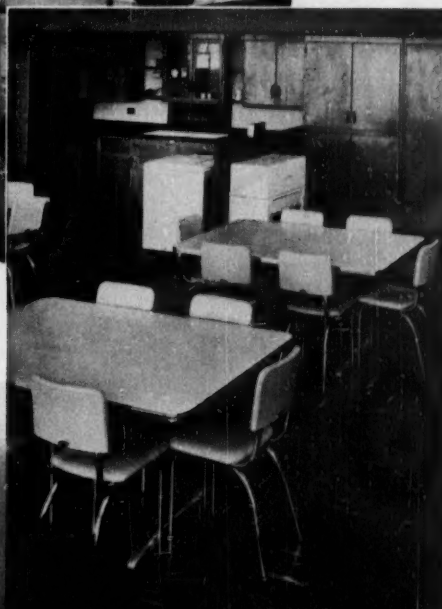


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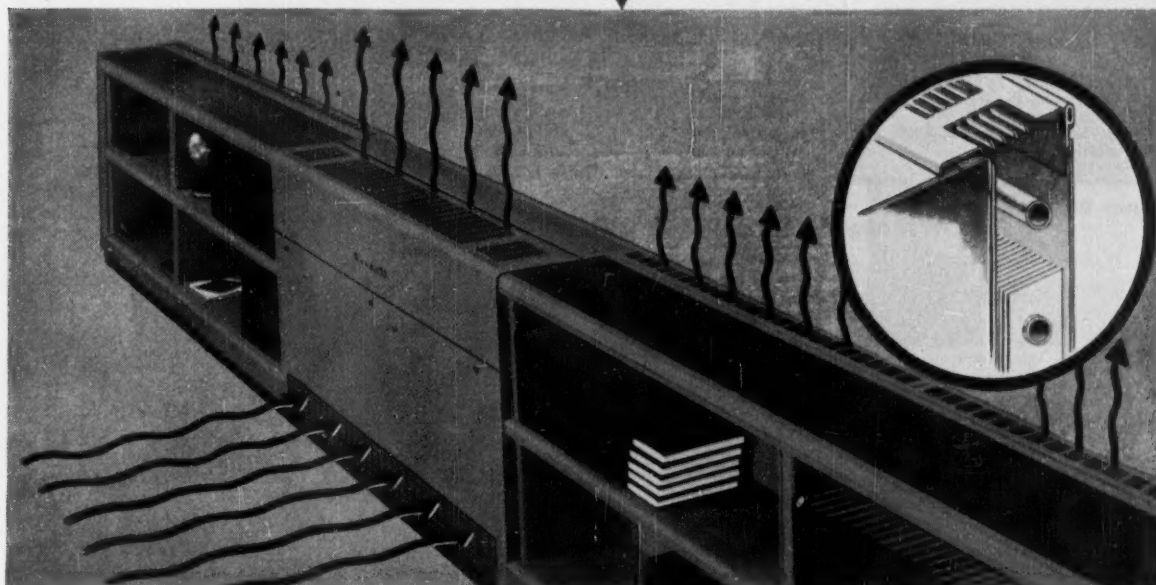
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ACCOUNTING MACHINES

Here at last is an accounting machine so swift, so efficient, so simple to operate, that it brings bigger savings to every job—does *all* jobs with unerring accuracy!

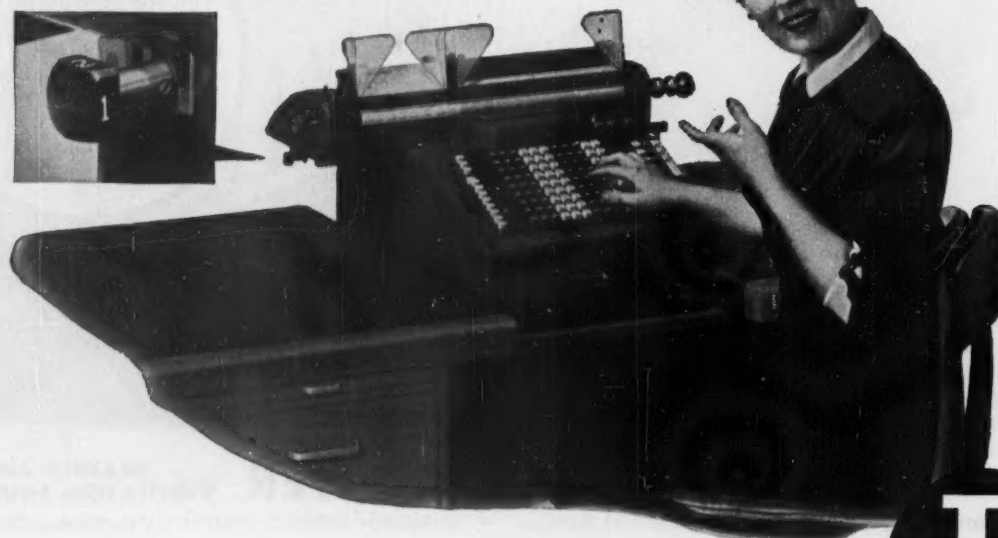
The Sensimatic's amazing effort-free speed comes from its exclusive sensing panel or "mechanical brain" that automatically directs it through every accounting operation. Its superior design makes the operator's work easy. There is less to do—less to learn. Automatic controls, continuous visibility of work in progress, and complete keyboard control, reduce operations and chance of error—provide peak production on *every* accounting job.

Get the facts today about Sensimatic's astonishing record of low-cost, high-speed operation! Call the Burroughs office nearest you. It's listed in the yellow pages of your telephone book. Burroughs Corporation, Detroit 32, Michigan.

**Now there are five !**

*Sensimatic 500 with 19 totals  
Sensimatic 400 with 9 totals  
Sensimatic 300 with 11 totals  
Sensimatic 200 with 5 totals  
Sensimatic 100 with 2 totals*

**CHANGE JOBS INSTANTLY . . .** at a turn of the job selector knob. Any four different accounting operations controlled by one sensing panel. Any number of panels can be used, so there's no limit to the number of jobs a Sensimatic will do.



WHEREVER THERE'S BUSINESS THERE'S





# Your students will have kitchens like this some day



This modern, all-electric kitchen is typical of the thousands of kitchens in new homes, and in existing homes that have been modernized to

include Electric Ranges. Is it any wonder that students want cooking instruction on this type of range?

*...of course, it's electric!*

Of this you can be certain: Your home economics students are looking forward to homes of their own—and their kitchens will be modern. And one of the most important appliances in the modern kitchen is its Electric Range.

To keep abreast of student needs for instruction in modern cooking methods, *Electric Ranges* in your school laboratory are a "must." Your local electric light and power company or electric appliance dealer can advise about installing modern, automatic *Electric Ranges*.

**Some valuable suggestions**—A helpful item to aid you in planning or remodeling the school laboratory is a FREE booklet—"The Modern Home Economics Department." It includes floor plans and other practical material. Use the coupon for your copy.

#### ELECTRIC RANGE SECTION

National Electrical Manufacturers Association, 155 East 44th Street, New York 17, N. Y.  
ADMIRAL • BENDIX • COOLERATOR • CROSLY • DEEFPREEZE • FRIGIDAIRE  
GENERAL ELECTRIC • GIBSON • HOTPOINT • KELVINATOR • MAGIC CHEF • MONARCH  
NORGE • PHILCO • WESTINGHOUSE



#### ELECTRIC RANGE SECTION

National Electrical Manufacturers Association  
155 East 44th Street, Dept. NS-11  
New York 17, N. Y.

Please send me, absolutely FREE, copy of "THE MODERN HOME ECONOMICS DEPARTMENT"—home economics laboratory planning booklet.

Your Name.....  
Name of School.....  
Street & No.....  
City..... Zone..... State.....

# Where the *other* services also count — it's always **BAYLEY WINDOWS**



Elementary School, Bexley, Ohio  
Sims, Cornelius & Schooley, Archt., Columbus, Ohio  
Altman Coady Company, Contr., Columbus, Ohio

## Bayley Aluminum Projected Window

*Offers New Features for Modern Schools of All Types*

The *first* essential to a truly satisfactory relationship is a fine quality product. But much more is also required. Full appreciation of this fact is the bedrock of Bayley's policy — and is the reason discriminating designers from coast to coast have so highly favored Bayley for so many years.

Bayley's determination to better serve through all the building stages — from the building's inception to its occupancy — is again exemplified in the Bayley Aluminum Projected Window. It represents the culmination of years of conscientious endeavor. First to fully recognize the universal advantages of the projected window, Bayley refined its desirable features in the most enduring construction material developed through long research by the Aluminum Industry. The result is an ideal window for schools, hospitals, institutional and commercial buildings — but equally suited for private living units — that reflects Bayley's years of specialized window experience.

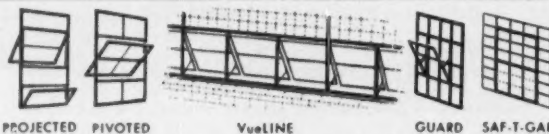
Regardless of window requirements, you too will find *extra values* in discussing your needs with Bayley. Write or phone.

See Bayley in Sweet's. Complete catalogs on aluminum windows, 17a/BA; steel windows, 17b/BAL; Saf-T-Gard Hospital Detention Window, 17b/BAY.

## Highlights of this New Popular BAYLEY Product

- Carries Quality Approved Seal of the Aluminum Window Mfrs. Ass'n. for materials, construction, strength of sections and air infiltration.
- Modern Appearance.
- Economical — Painting unnecessary.
- Permanent — Long carefree life.
- Simplicity — No complicated mechanism.
- Adaptable to all types of construction.
- Glazing outside — flat surface inside.
- Extra deep sections — Accommodate "Thermopane" or "Twindow" glazing.
- Easily washed from inside.
- Prepared for screens.
- Permits use of accessories, such as draperies, shades, curtains, venetian blinds or awnings.
- Positive acting hardware of white bronze.

**73** Years of  
**RELIABILITY**



**THE WILLIAM BAYLEY COMPANY**

Springfield, Ohio

District Sales Offices:

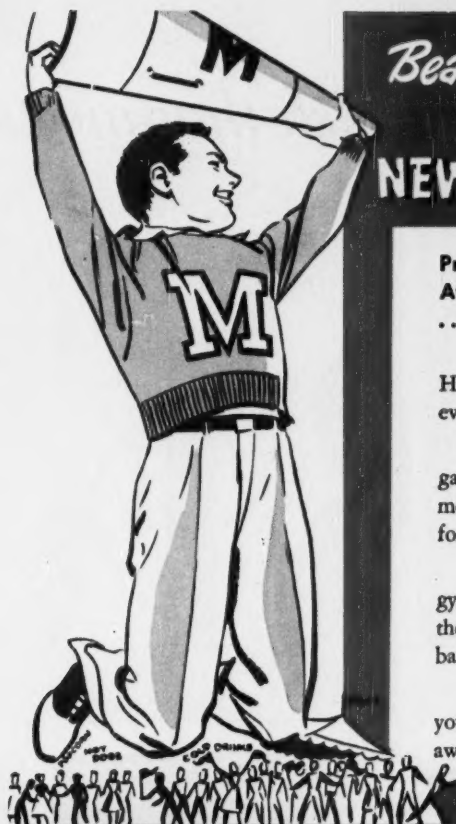
Springfield

Chicago 2

New York 17

Washington 16

The NATION'S SCHOOLS



## Beat Your School's Budget Problems with the NEW MANLEY SNACK BAR PLAN!

**Profits from Popcorn, Hot Dogs and Soft Drinks Sold at All Athletic Events Will Help You Buy Needed School Equipment ... Pay for Extra-Curricular Activities**

Here's the easy way to earn *extra money* for your school. How? Simply sell popcorn, soft drinks and hot dogs at all athletic events.

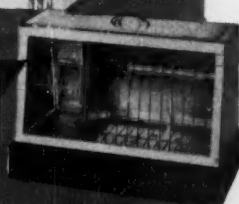
Crowds flock to your school's football, basketball and baseball games. Experience proves that 60% of these fans will buy refreshments of some kind. So sell them refreshments . . . make money for your school with these profit-making Manley machines.

You can easily set up a snack bar at some location at your gymnasium or stadium. Your students can build the snack bar themselves in the school shop. And students can also run the snack bar because Manley machines are so easy to operate.

For all the details on how the Manley Snack Bar Plan can help you earn extra funds for your school, mail the coupon below right away.



MANLEY  
ARISTOCRAT



MANLEY  
FRANK-  
BANK



MANLEY  
ICE-O-BAR

**Look What  
Profits from  
Manley Machines  
Will Provide  
Your School!**

Here is just a partial list of the many things that you can get for your school with profits made with efficient, easy-to-operate Manley machines:

Athletic Equipment	Laboratory Equipment
Musical Instruments	Phonograph and Records
Radio and Television Sets	Playground and Gymnasium Equipment
Shop Tools	Encyclopedias
Recording Equipment	Funds for outings, picnics, clubs, educational trips
Public Address System	

Almost anything you can think of that you want and need for your school.

**For Complete Information MAIL COUPON TODAY!**

**MANLEY, INC. Dept. NS-1153, 1920 Wyandotte St., Kansas City 8, Mo.**

- ☐ Please send complete information on how we can use Manley machines to set up a profit-making snack bar in our school.
- ☐ Please have your representative call to explain in detail how Manley machines can help our school.

Name \_\_\_\_\_

Title \_\_\_\_\_

School \_\_\_\_\_

Address \_\_\_\_\_

City \_\_\_\_\_ Zone \_\_\_\_\_ State \_\_\_\_\_



»»» When you plan a new school, your architect can help you to keep costs in line by recommending building materials that will do double-duty. One of the most versatile of these is Stark Glazed Facing Tile—

*The interior finish that meets*

# STARK

## **FOR MINIMUM MAINTENANCE COSTS**

Walls of Stark Glazed Facing Tile always keep their "just built" appearance, never fade, crack or craze. They eliminate the cost and inconvenience of refinishing big wall areas—for the life of the building.

## **FOR CLEANLINESS**

This glass-hard, impervious surface cleans easily with soap and water, will never stain or harbor odors—there's no place for dust or dirt to hide.

## **FOR CONSTRUCTION SAVINGS**

Stark Glazed Facing Tile is made in large-size, modular units. It goes up fast, gives you a fireproof, load-bearing wall and a decorative finish in a single operation.

## **FOR "COLOR-ENGINEERING"**

Stark offers a wide range of colors scientifically developed to aid any school task. You can choose one color to improve vision in classrooms, others to create a bright, cheerful atmosphere in multi-purpose rooms or cafeterias. There's a Stark color for every school requirement.

### *Get this Valuable Free Brochure*

Prepared to help you and your architect use Stark Glazed Facing Tile to best advantage. Includes a complete color chart, construction data, details, sizes, etc. Just write us on your letterhead. Address Dept. NS-11.



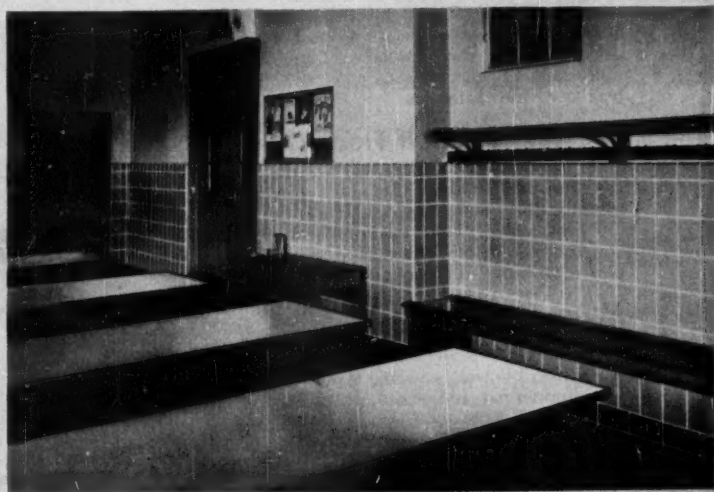
***Stark Ceramics, Inc.    Canton 1, Ohio***

14305 Livernois Avenue, Detroit 4, Michigan

15 East 26th Street, New York 10, N. Y.

*every school building need*

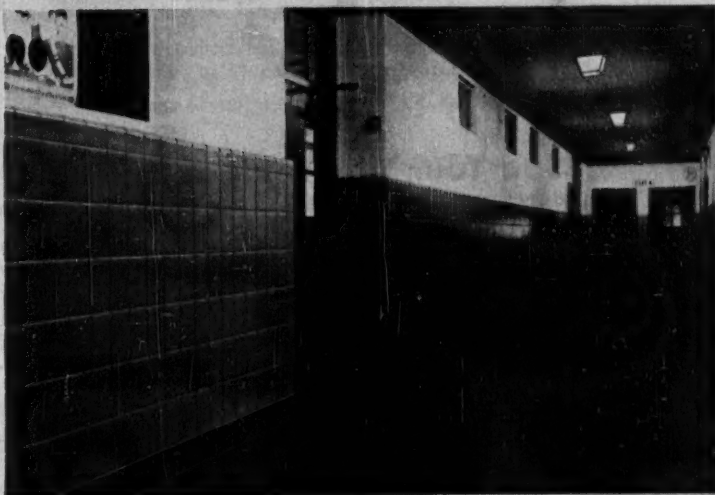
# glazed facing tile

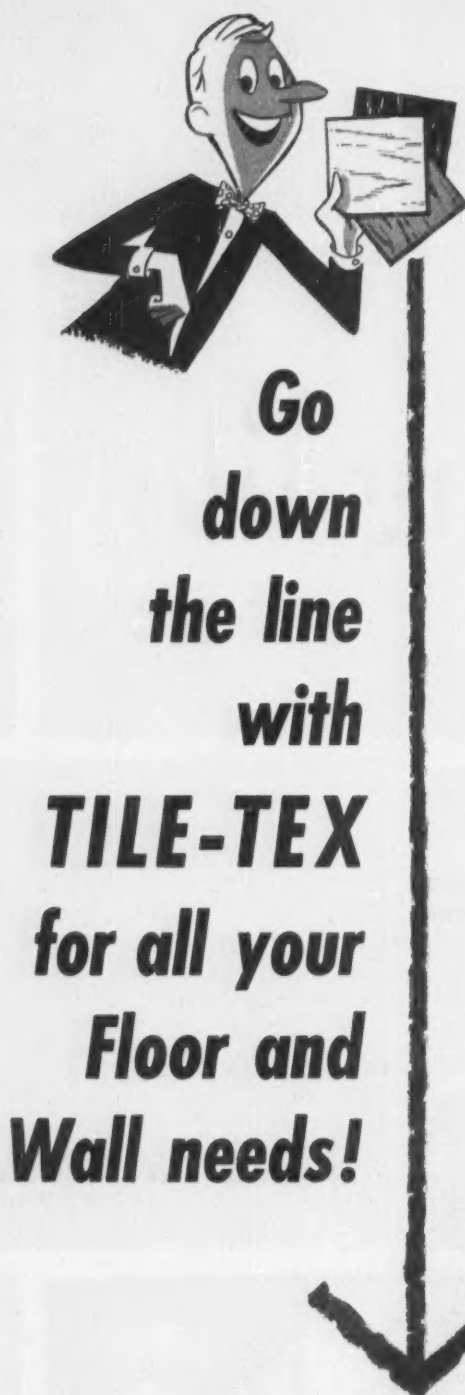


PUBLIC SCHOOL 33, NEW YORK, N. Y.  
ERIC KEDRON, ARCHITECT

Stark Glazed Facing Tile in ocular green shade helps to keep this cafeteria clean, cheerful. (above.)

Stark's grey mottle color provides a durable, handsome finish in Public School 33 corridors. (right.)





**...Select from 4 distinct and distinctive Tile-Tex Floor Products...** in over 80 lovely colors... and a wide range of sizes. The new flexible Mura-Tex Wall Tile is the perfect answer for wainscoting large areas.

#### **Flexachrome\* Vinyl Plastic-Asbestos Floor Tile**

The aristocrat of resilient flooring... "dresses up" an area *beautifully*... and how it *wears!* 28 sharp, brilliant colors and 5 sizes give you almost limitless versatility for design and pattern. It's *greaseproof*, too... so you can use it almost *anywhere*. Does not require waxing.



#### **Vitachrome† Greaseproof Resilient Floor Tile**

A light-colored *beauty* of a tile with exceptionally high *light reflectivity*. With its high resistance to food greases and oils, Vitachrome is excellent for use in kitchens, restaurants, cafeterias, pantries. Easy to install and maintain, it requires only the usual daily sweeping, periodic washing and occasional waxing.



#### **Tuff-Tex\* Greaseproof Industrial Floor Tile**

TUFF-TEX lives up to its name! A truly heavy-duty flooring material. Use this tile in machine areas, service stations, kitchens, cafeterias... anywhere grease abuse is a problem. It's so rugged that it will stand up under traffic of material handling trucks, yet in colors that brighten drab interiors.



#### **Tile-Tex\* Asphalt Floor Tile**

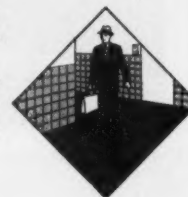
The standard of quality within the industry! For general use, this tile gives you an exceptionally durable flooring material that combines low first cost... easy, economical maintenance. It offers you distinctive design possibilities, due to a wide range of colors and sizes.



#### **Mura-Tex\* Plastic-Asbestos Wall Tile**

A new flexible wall covering that is ideally suited for commercial, industrial, or residential wainscoting and walls.

Mura-Tex Wall Tiles enable you to carry out your decorator scheme with a beautiful, *easy-to-clean* greaseproof material that resists acids and alkalis.



**See Your Tile-Tex Contractor...** listed in your classified telephone directory under the Tile-Tex trademark for complete information or write:

THE TILE-TEX DIVISION, The Flintkote Company, 1234 McKinley Street, Chicago Heights, Illinois

Tile-Tex—Pioneer Division, The Flintkote Company, P. O. Box 2218 Terminal Annex, Los Angeles 54, California.

The Flintkote Company of Canada, Ltd., 30th Street, Long Branch, Toronto, Canada



†TRADEMARK OF THE FLINTKOTE COMPANY  
\*REG. U. S. PAT. OFF.

**TILE-TEX... Complete Flooring Service**

The NATION'S SCHOOLS





Our Mixing Part Easily Adjustable from the Front. Easy removal of Thermostatic Motor and Valve Assembly with only a screwdriver makes it possible to inspect, clean or flush out mixer if necessary.



"HEARD THE GOOD NEWS, FELLAS? THEY'RE GOING TO PUT POWERS MIXERS IN THE SHOWER ROOM... NO MORE BOOBY TRAP SHOWERS!"

Simple  
Durable  
Construction

Insures Long Life  
and Minimum  
of Maintenance



## Banish "Booby Trap Showers"

Give the students under your care  
real shower safety and comfort

Install

**POWERS**

Thermostatic Water Mixers

## Refreshing • Relaxing Safe Showers

— are always enjoyed by bathers in Powers Thermostatically Controlled showers. Water temperature stays where the user wants it. There's no danger of slipping and falling while trying to dodge an unexpected shot of cold or hot water.

Labor Costs no more to install a quality shower mixer. Powers mixers cost more. They're worth more. They're Safe 3 ways.

1. No unexpected shots of hot or cold water caused by pressure or temperature changes in water supply lines;
2. Failure of cold water supply instantly shuts off shower delivery;
3. Being thermostatic Powers mixers stop scalding caused by dead-ends in hot water lines.

POWERS Mixers Stop Waste of Hot and Cold Water. Bathers quickly get water at the right temperature. No waste of time. No waste of hot or cold water. Shower temperature always remains constant wherever bather wants it.

"Keep Everybody Happy" with Powers Regulated Showers

\*POWERS REGULATED  
SHOWERS ARE TOPS  
NO "HALF-SAFE"  
SHOWERS FOR US!

See our catalog in *Sweets* or  
Write for **POWERS Bulletin 365**

Just ONE Shower ACCIDENT  
may cost many times more  
than POWERS mixers.

• This mixer complies fully with Federal  
Specifications WW-P-341a.

Established in 1891 • **THE POWERS REGULATOR COMPANY** • SKOKIE, ILL. • Offices in Over 50 Cities

(b34c)

Freedom of movement for the student — functional,  
flexible for the elementary grade classroom purposes.  
The most adaptable group-work furniture designed for  
the American market today.

## A-D's GROUP-WORK SPECIALIST

# The Airplane Table



Illustrated here is  
American Desk's  
NO. 11 STANDARD  
CHAIR, a perfect  
companion piece for  
matching with the  
tubular airplane table.

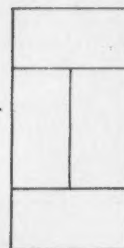


**TUBULAR STEEL LEGS**—This is the tubular version of the airplane table made strong with sixteen-gauge tubular steel  $\frac{7}{8}$ " in diameter, eighteen-gauge skirt with twenty-two-gauge book compartments. Top of maple, birch, or Fibersin.

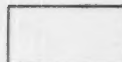
The American school furniture market offers no desk more adaptable to grouping arrangements required by the modern classroom group-work technique. The airplane table is a proven product approved throughout the nation and is the result of research and experimentation by our engineers and outstanding educators in the country. Have your distributor demonstrate the airplane table *before* you specify elementary grade furniture.



Looking down on the tops



TWO UNITS BACK TO BACK  
WITH ONE UNIT ON EACH END  
TO ACCOMMODATE EIGHT STUDENTS



A SINGLE UNIT  
FOR TWO STUDENTS



TWO UNITS BACK TO BACK  
FOR FOUR STUDENTS

Easy to arrange in numerous seating plans — illustrated here in a modern classroom.

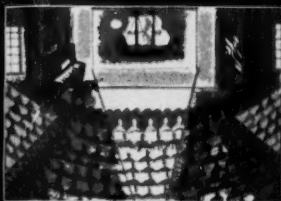
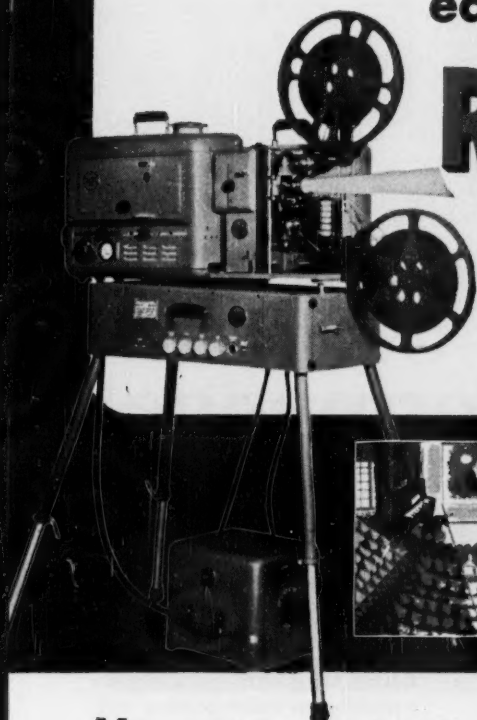
**American Desk**  
MANUFACTURING COMPANY • TEMPLE, TEXAS

# NOW

## SHARPER, CLEARER, MOVIES

for large audiences in industry, business,  
education and entertainment...

# RCA PORTO-ARC 16mm PROJECTOR



**MORE LIGHT** than ever thought possible with a 16mm projector assures users of the RCA Porto-Arc Projector of sharp, clear and bright pictures on the screens of large auditoriums.

Industry, business and education can now show 16mm films at their best in company or school auditoriums...in tents at road shows, in fairs in rural areas, and to groups gathered outdoors.

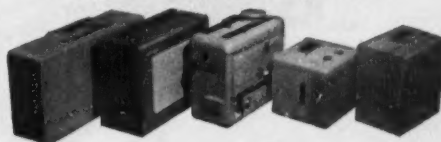
RCA's new Porto-Arc 16mm Projector operating at 30 amperes delivers up to 1600 lumens, providing brilliant screen images on screens as wide as 20 feet. When operating at 10 amperes, the 750 lumen output provides brilliant pictures on screens up to 15 feet wide, and one set of carbons burns over two hours.

The powerful amplifier is especially designed for 16mm reproduction of speech and music at high levels with the best sound quality. It provides all the power output needed for a wide choice in speaker setups—from single or multiple portable speaker units to theatre-type systems, and it also provides microphone and record player inputs for public address.

RCA's Porto-Arc Projector incorporates the superior professional features and top-quality workmanship of the famous "400" projector. These include dependable operation... "thread-easy" film path... the time-proved "400" mechanism.

This rugged and completely portable 16mm projector disassembles into 5 easy-to-carry cases. It can be set up or taken

down in five minutes. The suitcase type projector stand has adjustable, non-slip legs and an elevating mechanism. It provides ample storage space for its legs, cable, carbons and other accessories.



We'll be pleased to send you information on RCA's complete line of 16mm projectors.

#### MAIL COUPON FOR LITERATURE NOW

VISUAL PRODUCTS, Dept. 80W  
Radio Corporation of America, Camden, N. J.  
Please send me information on the new RCA 16mm Porto-Arc Projector.

NAME \_\_\_\_\_ TITLE \_\_\_\_\_

ORGANIZATION \_\_\_\_\_

ADDRESS \_\_\_\_\_

CITY \_\_\_\_\_ ZONE \_\_\_\_\_ STATE \_\_\_\_\_

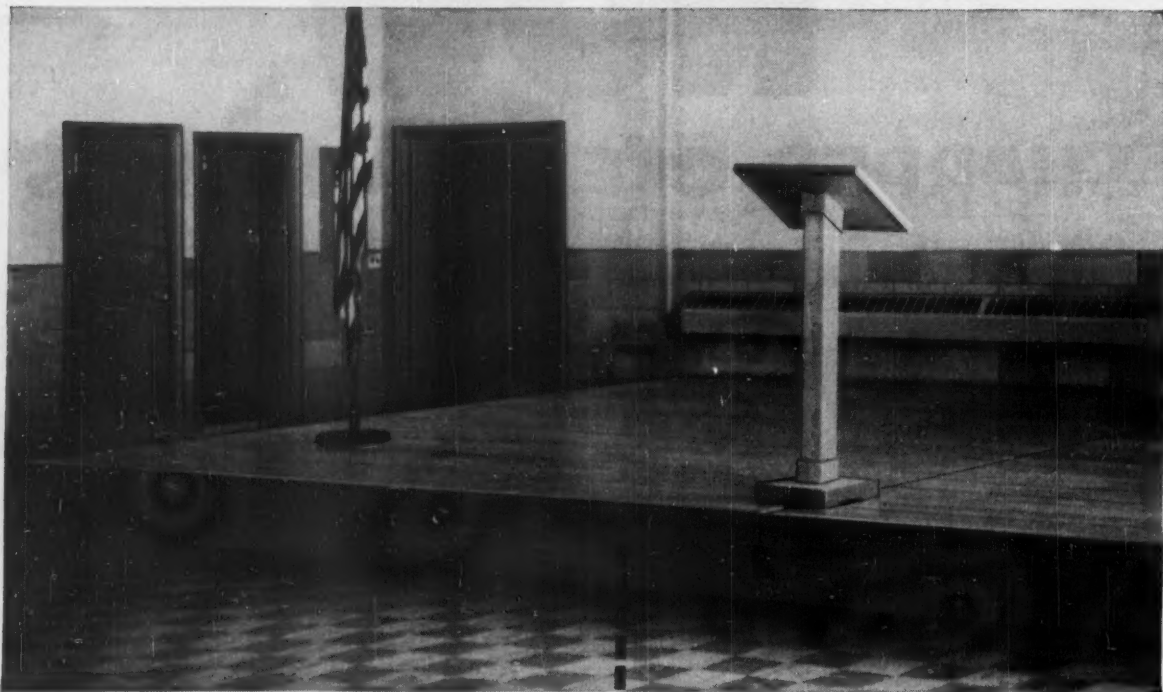


VISUAL PRODUCTS  
**RADIO CORPORATION of AMERICA**  
ENGINEERING PRODUCTS DEPARTMENT, CAMDEN, N. J.

In Canada: RCA VICTOR Company Limited, Montreal

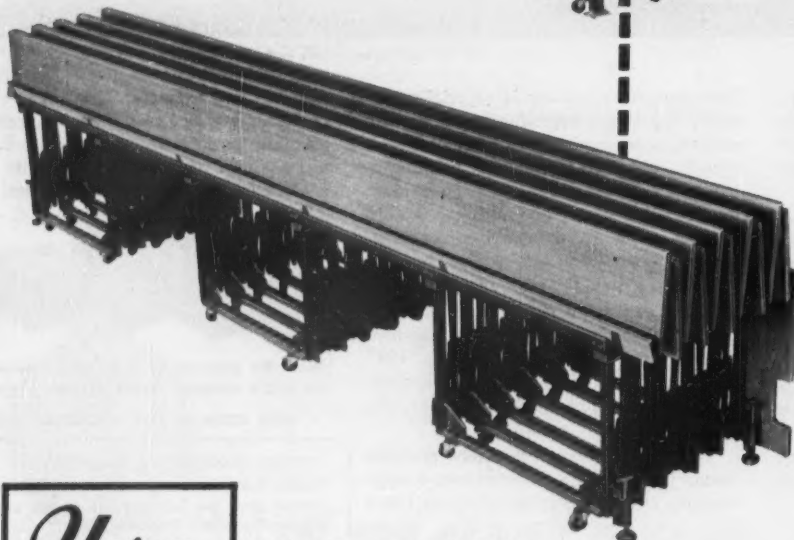


# FOLDING STAGES



**...star in every performance!**

Horn Folding Stages are a valuable teaching aid, useful for meetings. And whether it's for classroom instruction, or multi-purpose room assemblies, these stages increase the utility of all instructional areas.



**Easy to open**—completely portable, on roller-bearing rollers, Horn Folding Stages are easy to move, easy to open for use in any room. Sturdy steel understructure provides solid foundation. Locking action keeps stage stable, adjusts to uneven floors.

**Easy to store**—Stages fold compactly when not in use. A stage that extends to 11 feet 4 inches, folds, stores in 25¼ inches. Horn Folding Stages are available in standard widths, 15 and 24 inch heights and depths up to 35 feet. Write today for brochure and full information about the only portable folding stage.

*Horn*

SCHOOL EQUIPMENT DIVISION OF  
THE BRUNSWICK-BALKE-COLLENDER COMPANY • 623 SO. WABASH, CHICAGO, ILL.

# GOLD SEAL Bulletin Board Cork

**A**vailable in single piece rolls up to 90' long. No need for unsightly seams.

**C**omplete color line: 2 tans, 2 greens, 1 gray in 1/4" gauge. Three colors in 1/4" gauge. 73" or 49" wide.

**B**urlap back for greater strength. Easily installed directly to backing board or smooth plaster.

**D**urable. Takes cleaning and thumb-tacks in its stride. Many Gold Seal bulletin boards still giving service after years and years of hard use.



The Chamberlain School in New Britain, Conn. 1/8" Veltona and Gold Seal Bulletin Board Cork is used throughout. Good idea... 1/8" Veltona in the same Nairn Inlaid Linoleum for work surfaces. Architect: Warren S. Holmes. Assoc. Architect: Emilio DeRienzo.

# GOLD SEAL Nairn Inlaid Linoleum

**E**asy to maintain. Dense, smooth surface with no dirt-catching cracks.

**G**uaranteed. With all Gold Seal products you get an absolute guarantee of satisfaction—or your money back.

**F**lexible. Gold Seal Nairn Inlaid Linoleum offers a quiet, resilient, comfortable surface for teachers and pupils.

**H**ard to wear out. Some installations of Gold Seal Nairn Inlaid Linoleum are still giving top service after 30 years of use... proof of its quality and long-term economy.

For further information, write:

**CONGOLEUM-NAIRN INC.**

Kearny, N. J. © 1953



**GOLD SEAL® FLOORS AND WALLS**

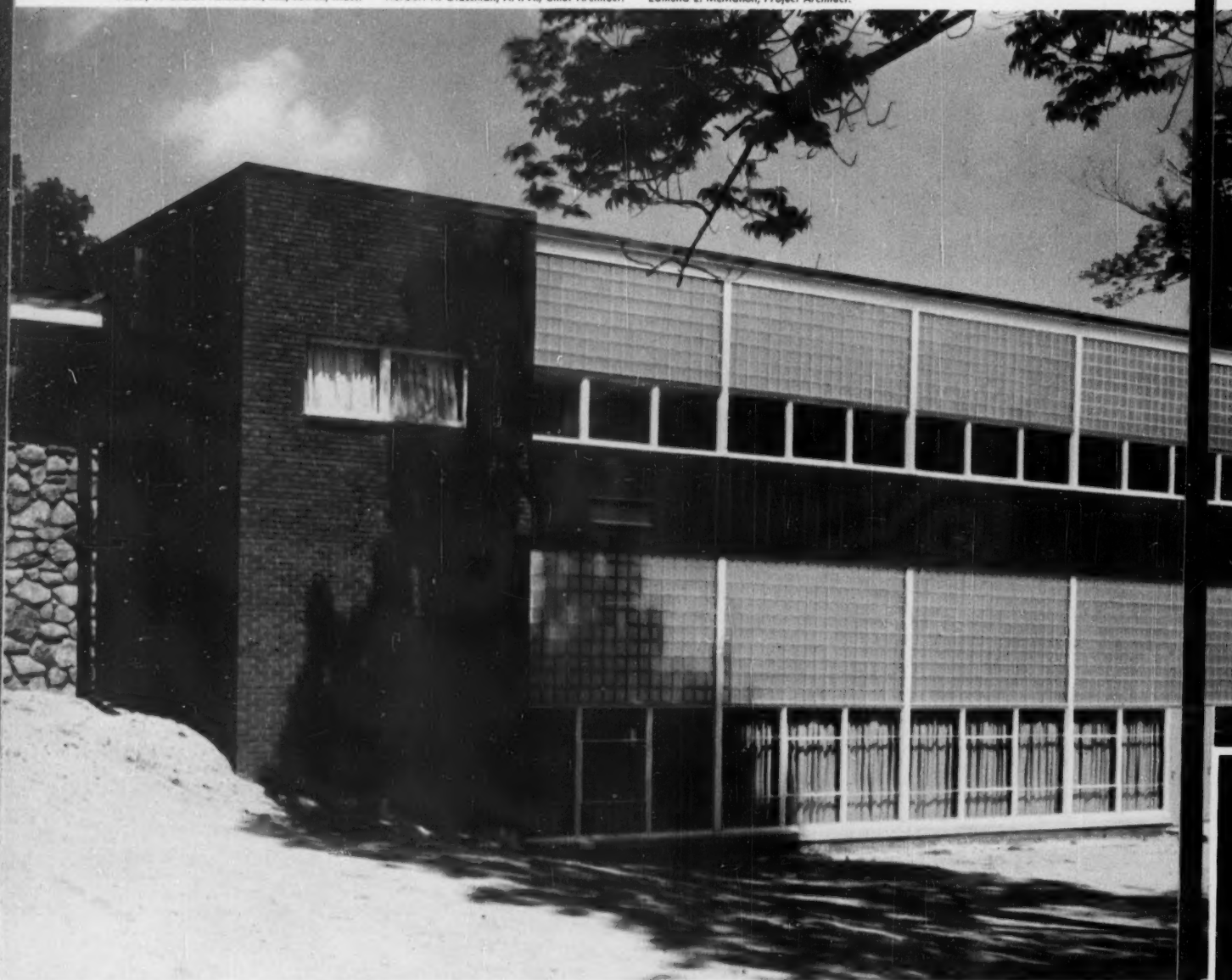
# "I am amazed at the quality of light from these PC Glass Blocks,"

says **Reverend John A. McSweeney**, *Pastor*  
*Our Lady of Monadnock Academy, East Jaffrey, N. H.*

Perley F. Gilbert Associates, Inc., Lowell, Mass.

Herbert H. Glassman, A. I. A., Chief Architect.

Edmund E. McMahon, Project Architect.



## Here's what you get with PC Glass Blocks

- **BETTER LIGHT**—a wide range of patterns for every school lighting need . . .
- **LOWER MAINTENANCE**—window maintenance minimized leaving custodian free for other duties . . .
- **LOWER HEATING COSTS**—PC Glass Block panels have more than twice the insulating value of single-glazed windows . . .
- **LESS DISTRACTION**—sound reduction factor helps check outside noises . . . less distraction for students and teachers . . .
- **IMPROVED APPEARANCE**—PC Glass Block panels impart clean architectural lines to any school—new or old.





● Without question, this is one of the most attractive and useful schools ever constructed. It was built in 1951 for a cubic foot cost of *only* 82¢.

Concerning the PC Glass Blocks, Reverend McSweeney says, "Our teachers think this is the finest building they ever taught in because of the excellent light characteristics of the glass block panels. During a long, cold New Hampshire winter, our classrooms were extremely comfortable because the glass blocks are such good insulators. Reduced heating cost is one thing we can count on.

"Maintenance of the glass blocks is obviously not going to be a problem. We expect to hose them down once, maybe twice a year."

Be sure *you* know the PC Glass Block story before you build or remodel your school. No other building product will give you so much for your money. Send the coupon for more information.

## Pittsburgh Corning Corporation

PITTSBURGH, PA.



Pittsburgh Corning Corporation, One Gateway Center  
Dept. AK-113, Pittsburgh 22, Pennsylvania

Please send me a FREE copy of your booklet on the use of PC Glass Blocks in schools and other public buildings.

- ☐ Have engineer call to discuss specific problem.  
☐ Send information on "Skytrol" blocks for skylights.

Name ..... Title .....

School System .....

Address .....

City ..... Zone ..... State .....

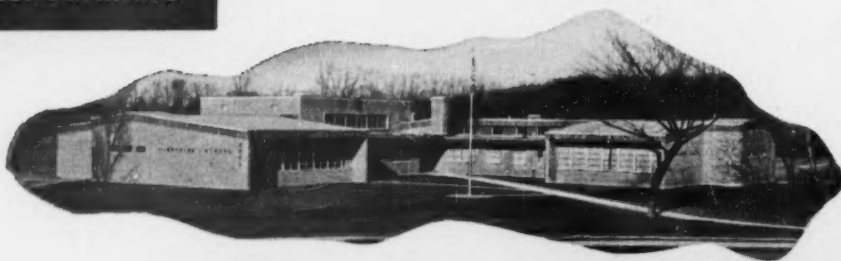
Adaptable, Economical



The ORIGINAL Tubular  
Steel School Furniture

Easy-to-move furniture fits  
classroom needs of modern

## GLENCAIRN SCHOOL

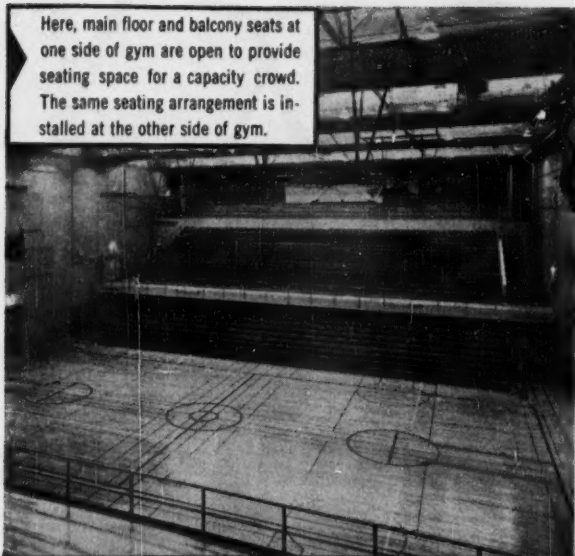


Under the supervision of Miss Janneta Sloan, Principal, such classrooms as this are used for many student activities. Heywood S 1039 OF Table-Desks and S 915 All-Purpose chairs are easily arranged for group study. Both are available in graded sizes. For further information, write today for the fully illustrated catalogue of Heywood-Wakefield School Furniture.



The recently completed Glencairn Elementary School, East Lansing, Michigan, is as attractive as it is functional, making it ideal for teaching and learning. The classrooms are spacious and filled with light to reduce eyestrain and encourage concentration. The entire school is done in soft, relaxing colors, complemented by the trim, modern design and light finishes of Heywood-Wakefield Tubular Steel Furniture. This progressive new school was designed by Laitala and Nuechterlein, Architects, Lansing, Mich. Installation of Tubular Steel Furniture arranged by Heywood-Wakefield distributor, Oglesby Equipment Company, Detroit, Mich. Heywood-Wakefield—School Furniture Division—Menominee, Mich.—Gardner, Mass.

Here, main floor and balcony seats at one side of gym are open to provide seating space for a capacity crowd. The same seating arrangement is installed at the other side of gym.



## HOW TO SEAT MORE PEOPLE IN LESS SPACE

The two pictures at the left are only one of thousands of examples showing how tremendous savings in building costs can be achieved through the use of Medart Telescopic Gym Seats.\*

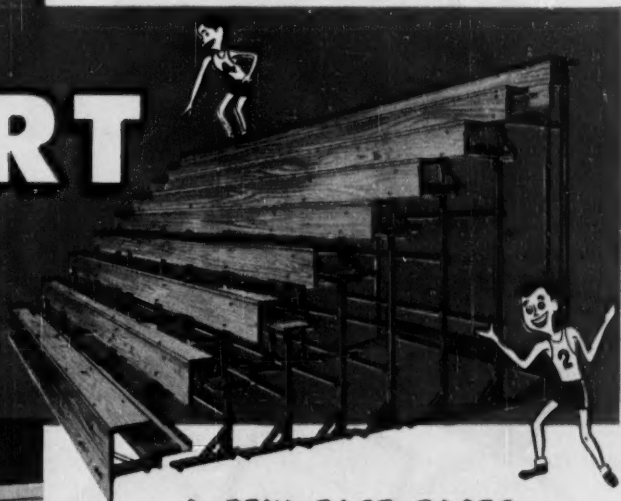
In open position they provide adequate comfortable and safe seating for capacity admission-paying audiences. In closed position they "recover" virtually every square foot of floor area for normal daily use. Thus Medart Seats are the ideal solution to the problem of constructing a limited-budget gymnasium that will seat thousands of spectators but which need be only slightly larger than one with no seating at all!

Medart Seats avoid the costly wasted space required for permanent seating. A smaller building means less heating, less maintenance, less of all other expenses incidental to the upkeep of a larger structure.

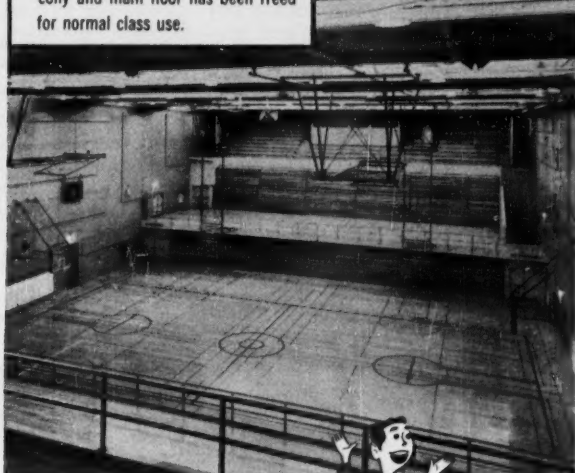
It is sound business to learn how Medart Telescopic Gym Seats actually pay for themselves.

# MEDART

## TELESCOPIC GYM SEATS



Here seats are closed. Note that nearly every foot of space on both the balcony and main floor has been freed for normal class use.



## A FEW FAST FACTS

**Safe!** The self-supporting steel understructure will carry loads of 400 pounds per linear foot per row. Each seat board, foot board and riser rests on 4 vertical steel uprights that place the live load on the floor where it belongs. Stability tests show no side sway at peak of stress.

**Easy To Handle!** Exclusive "Floating Motion" design makes Medart Seats easy to open and close. Automatic retracting rubber-cushioned rollers protect gym floors during opening and closing.

**Versatile!** Only one row, or as many rows as needed, may be opened while remaining rows are locked in closed position.

**Other Features** mean many extra years of service and lower maintenance cost. Get ALL the facts now!

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Architect: Jess J. Jones, Long Beach, Calif.



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*Especially planned  
to help today's teacher  
do a better job with  
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# teaching plans

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## CORAL GABLES HIGH SCHOOL

Coral Gables, Florida

Architects: August Geiger & William H. Merriam

Associate Architect: Van Lyell

School Board Architect: J. E. Garland

Acoustical Contractor: Lotspeich Flooring Co.



Noise-absorbing ceilings of Armstrong's Cushiontone throughout the school soak up the harsh clatter of footsteps and chatter of young voices. In classrooms, this economical wood-fiber acoustical tile noticeably improves concentration.



High light reflection is another important feature of Cushiontone. In the cafeteria, Cushiontone's smooth finish spreads light evenly, without glare.



Exceptionally efficient sound conditioning is provided in the choral and band room by Armstrong's Travertone, a fissured mineral wool acoustical tile.

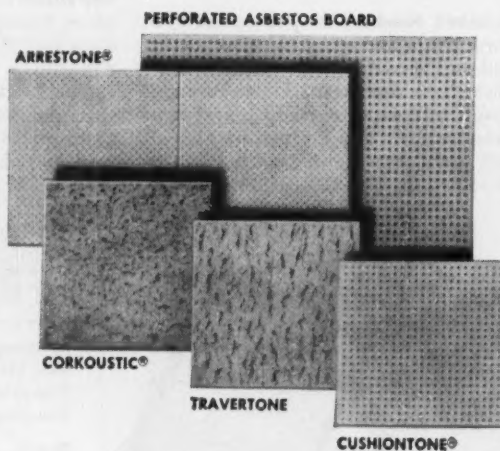
## Low-cost sound conditioning makes schoolwork easier for everyone

School is more productive for both teachers and students at Coral Gables High. Classes are easier to conduct, lessons are learned faster. One big reason is the comfortable quiet provided by noise-absorbing ceilings of Armstrong's Cushiontone and Travertone.

A perforated wood fiber acoustical tile, Cushiontone is an efficient noise reducer. It absorbs as much as 75% of the sound that strikes its surface. Both installation and maintenance are easy and economical. And Cushiontone's low cost makes it possible to sound condition large areas economically.

Armstrong's Travertone, used on both ceiling and side walls of the choral and band room provides excellent acoustics. Armstrong's Travertone offers high light reflection value and is also completely incombustible.

See your Armstrong Acoustical Contractor for full details on Armstrong's entire line of sound-conditioning materials. There's one to suit every need and budget. For the free booklet, "How to Select an Acoustical Material," write Armstrong Cork Company, 4211 Wabank Avenue, Lancaster, Penna.



**ARMSTRONG'S  
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The NATION'S SCHOOLS



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PEERLITE with GRATELITE LOUVER  
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Permits flexible pattern planning. You  
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For 2, 3, or 4 lamps - 4' or 8' long.

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**more cooling  
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Wide open on top and bottom  
for brisk air-circulation

Cool lamps last longer.  
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RESULT: greater efficiency  
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*Mark of Leadership*

# Herman Nelson Leads



## **SPECIFICATIONS FOR CLASSROOM COMFORT**

*SYSTEM MUST PROVIDE FOR RAPID HEATING  
... AIR FOR VENTILATION ... AIR FOR COOLING  
... A MEANS OF RESPONSIVE CONTROL AND  
PROVISION FOR TRAPPING THE WINDOW  
DOWNDRAFT. THE SOLUTION IS FOUND  
IN THE ABOVE DRAFT/STOP SYSTEM.*

# ... in Engineering

Herman Nelson leadership in the field of schoolroom heating, ventilating and cooling, was achieved, to a large degree, by anticipating the ever-changing trends in schoolroom architecture... and by engineering the practical solutions.

## THE PROBLEM

A few years ago, engineers in the heating and ventilating industry were faced with the problem of engineering, designing and then building a system of unit ventilation capable of trapping and controlling the downdrafts of cold air pouring off the much larger window areas used in modern classroom designs.

## THE INVESTIGATION

Backed by many years successful experience building unit ventilators—Herman Nelson engineers tackled the task presented by the new, and still "modern" classroom designs.

During the period of investigation—many ideas were discussed and discarded. A few reached the planning stage. Still fewer were tried out. The search narrowed to three major ideas. From these three, one system, DRAFT|STOP, was selected.

The engineering department made its report in March, 1950. *This was before any of today's systems for controlling downdrafts were on the market!*

**IDEA "A"—THE CONVECTION SYSTEM.** This idea proposed the use of strip convectors, of limited capacity, placed in back of the cabinet, releasing heated air along the window at the sill.

The system worked, to the extent that it worked at all, only when the classroom as a whole needed heating. It failed to maintain control of the window draft—when *cooling* was required! This idea also increased installation costs without providing justifiable improvements in performance.

It was discarded by Herman Nelson engineers.

**IDEA "B"—AIR DISCHARGED INTO PLENUM CONDUIT.** This idea was a unit ventilation system that relied on the unit ventilator to discharge air into a plenum duct. Again *heating* was its prime function and it had the same weaknesses as the Convection System plus an increase in power requirements and in costs.

This idea was also discarded by Herman Nelson engineers.

## THE SOLUTION

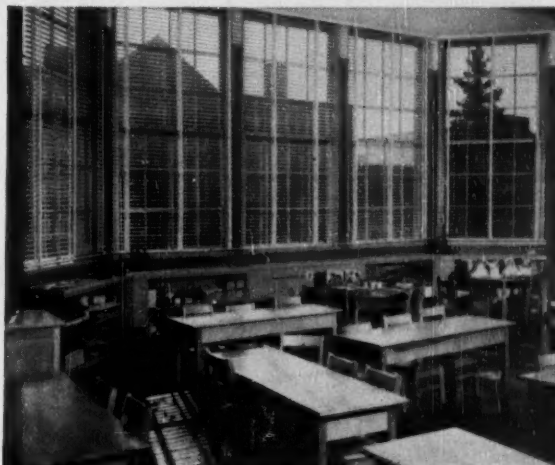
**IDEA "C"—THE DRAFT|STOP SYSTEM.** Here the fundamental weaknesses of the first two systems, were overcome. This system differs from all other types of schoolroom ventilation by intercepting the air cooled by the window *before* it has a chance to spill out into the classroom and cause drafts! Once captured, the cold air stream is never permitted to flow back into the room. And since the DRAFT|STOP system does not attempt to fight the cold downdraft problem by adding heat, *except when such heat is actually needed*—it works equally well under all conditions and at all times: permanently blanking out the downdraft from the window as a source of classroom discomfort.

DRAFT|STOP is the one system that offers a "perfect classroom climate" without drafts in any season—or in any part of the country. This system was introduced to the American market in September, 1950. Architects and engineers, the country over, have since put the "Mark of Leadership" on DRAFT|STOP by specifying and installing it in thousands of classrooms.

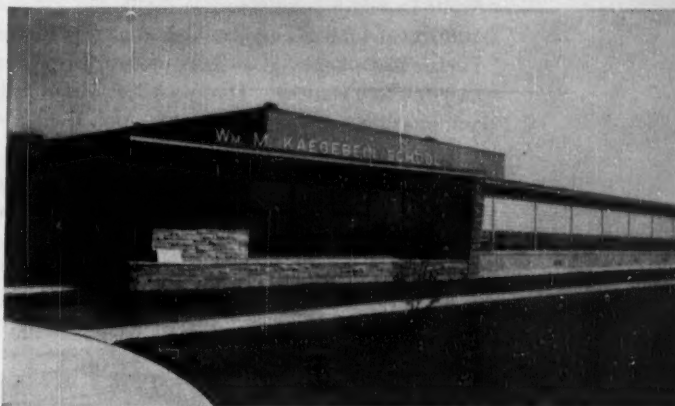
Write for complete information and Experience Reports to: Dept. NS-11, Unit Ventilator Products, AMERICAN AIR FILTER CO., INC., Louisville 8, Ky.



The SAN MATEO KNOLLS SCHOOL, San Mateo, California, sits snugly against the rolling California hillside which seems to emphasize the smooth modern lines of this new school. Architectural features include fixed vision-strip windows with a middle opening sash providing an open, picture window effect. All classrooms are North lighted. The DRAFT|STOP installation is in the popular Sahara-tan finish. Architects, FALK AND BOOTH, Consulting Engineers, DEANE AND HILL.



This is an interesting treatment of a bay-window utilizing filler sections and DRAFT|STOP end panels in the HENRY WADSWORTH LONGFELLOW SCHOOL, in Portland, Maine. Superintendent of Schools, HARRISON LYSETH; Architects, MILLER AND BEAL, INC.; Consulting Engineer, FELS COMPANY, INC.



The WM. M. KAEGBEIN SCHOOL, Grand Island, N. Y., is a typical example of good modern one-story school architecture featuring glass block with vision strip windows and an interesting use of native stone which adds warmth and beauty to the building. School Principal, MISS VERONICA CONNOR; Architects, ROSWELL E. PFOHL; Consulting Engineers, BEMAN AND CANDEE; Mechanical Contractors, JOHN W. DANFORTH COMPANY.

**DRAFT STOP**

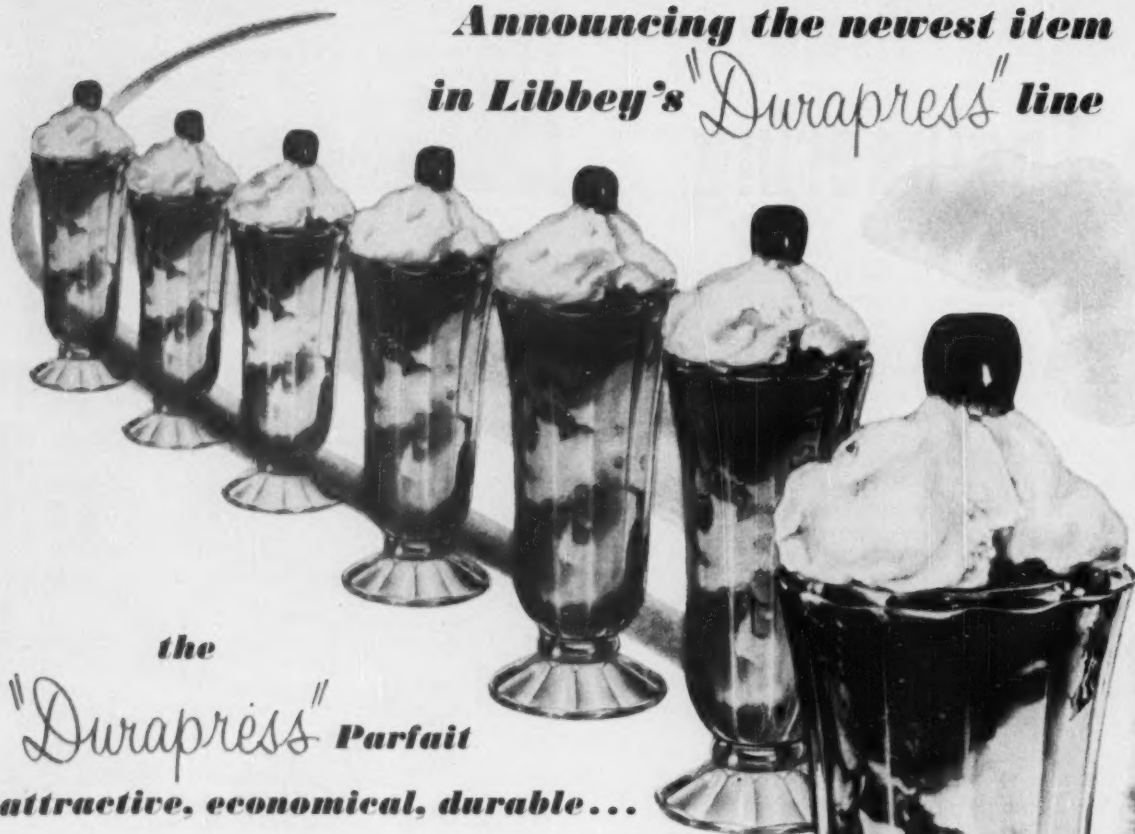
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SYSTEM OF CLASSROOM  
HEATING AND VENTILATING



Announcing the newest item  
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the  
"Durapress" Parfait  
attractive, economical, durable...

YOU ASKED US FOR IT and here it is: the "Durapress" Parfait to match the popular Libbey "Durapress" line of sherbets, sundaes, sodas.

Made of Libbey's regular high-quality glass, this new Parfait has a heavy-glass base, modern shape, and appealing, easy-to-clean contour. "Durapress" glassware is low in cost, yet amazingly strong and durable. And, the Libbey name is your guarantee of highest quality.

Make the desserts you serve look more tempting. Serve them in sparkling glass. Folks know food and beverages taste better, too, because glass gives absolute flavor protection... will never impart taste.

Your Libbey supplier is ready with samples and prices. See him or write direct to Libbey Glass, Toledo 1, Ohio.



No. 5110  
12-oz.  
Soda

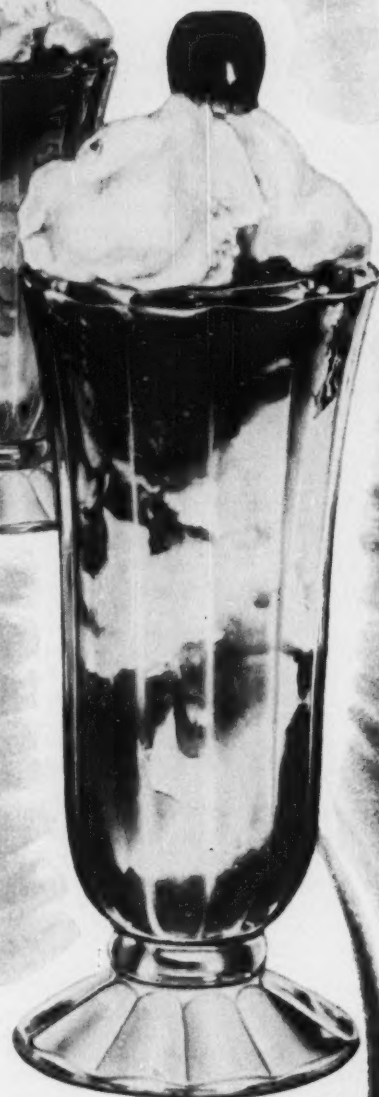


No. 5115  
6 1/2-oz.  
Sundae



No. 5102  
3 1/2-oz.  
Sherbet

No. 5103  
4 1/2-oz.  
Sherbet



No. 5112  
1 1/2-oz. Parfait



LIBBEY GLASS "Durapress" Glassware  
ESTABLISHED 1818

LIBBEY GLASS, Division of Owens-Illinois Glass Company, Toledo 1, Ohio



You Can Lower Cafeteria Costs  
And Give School Lunches More  
Variety With ...

HEINZ 51oz.  
CHEF SIZE  
SOUPS



#### NEW! Eight-Quart Electric Food Warmer

New Heinz Electric Food Warmer heats foods to serving temperatures rapidly, holds them there automatically, pays for itself quickly. Ask your Heinz Man for details.

#### FREE! Meal Planner


Full month of nutrition-packed menus which will please your students and meet U. S. Government school requirements are included in this book. Write to the Food Service Center, H. J. Heinz Company, Pittsburgh, Pa.



**L**EFTOVER LOSSES and preparation costs—two sizeable red-ink items for many school cafeteria supervisors—are cut to the bone when you serve Heinz Condensed Soups in your school dining rooms.

- Portion cost can be controlled almost to the penny—each 51-ounce tin makes 17 six-ounce servings. There are 14 good-tasting favorites to give your menus great variety. You can be sure of the same high quality at all times and can depend upon that famous Heinz “homemade” flavor to satisfy your customers.

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**CONDENSED**  
**SOUPS**

You Know It's Good Because It's HEINZ!

for clean . . . quick . . . efficient food service  
**this U. S. Naval Hospital**

*U. S. Naval Hospital, Corona, California*  
*Commanding Officer: Capt. A. B. Chesser, Medical Corps, U.S.N.; Executive Officer: Capt. R. S. Simpson, Medical Corps, U.S.N.; Commissary Officer: Lt. O. R. Scheile, Medical Service Corps, U.S.N.; Chief Dietician: Lt. Eva Minkel, Navy Nurse Corps*



Toasters, griddles and fryers  
in the service area.



# cooks with **GAS**

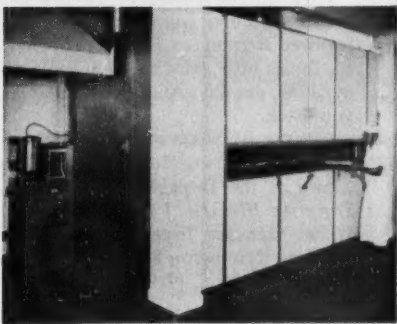
**the modern, dependable way  
of preparing food in quantity**



The special diet kitchen serves its patients on an insulated, sterilized plate which is warmed by a direct GAS flame, and then filled to individual requirements.



Forty gallons of coffee are made each meal time in these two 20-gallon Gas-fired coffee urns.



Bakers like the even temperature and circulation of controlled heat in this 8 tray Gas-fired oven.

At the U. S. Naval Hospital in Corona, California, Navy, Marine, Army, and Air Force personnel receive the most up-to-date care that modern medical science can provide.

To insure food service on a par with the other facilities, the hospital relies on the day to day speed and efficiency of GAS and Modern Gas Cooking Equipment . . . equipment that provides the proper heat for any cooking task . . . and provides it *instantly*. To serve 1800 to 2000 meals daily, the hospital has three fully equipped galleys, including a special diet kitchen and bake shop. The stainless steel Gas equipment includes . . .

- 2 3-deck Magic Chef Baking Ovens**
- 2 Middleby-Marshall Revolving Ovens**
- 4 Magic Chef Roasting Ovens**
- 2 Wolf Fryers**
- 3 Savory Toasters**
- 1 Colt Autosan Washer**
- 5 Magic Chef Griddles**
- 2 McKee Coffee Urns**

Only GAS provides the speed and excellent cooking results that volume food preparation requires . . . and the economy that good management demands. Your Food Service Equipment Dealer or Gas Company Representative will help you select the proper Gas equipment to best suit your needs.



**AMERICAN GAS ASSOCIATION**

420 LEXINGTON AVENUE, NEW YORK 17, NEW YORK

# Why teach typing the old-fashioned way?



*"Start beginning students on electric typewriters," say today's leading educators, "and they learn faster—increase WPM rates as much as 50%." Here's how this new-fashioned approach simplifies teaching and learning...*

The time is here for the electric typewriter to be recognized for its true worth as a teaching instrument.

Numerous classes in leading public, private and parochial schools have proved the electric is more than a "finishing tool." In many schools it has proved the most economical machine for developing fast, accurate typists in beginning classes. Educators agree—ELECTRIFY AND YOU SIMPLIFY.

## Four problems eliminated

Electrification of the beginning classroom speeds up teaching and learning in four ways. (1) Beginning students type faster and sooner because difficult time-consuming learning of "touch" is eliminated. (2) Carriage return drills are eliminated; electrified "CR" key operates like another keystroke, keeps fingers in typing position. Students do not take eyes from copy and relocate hands at end of every line. Typing continuity is not interrupted, each classroom hour is more productive.

(3) Electrified shift key simplifies teaching of capitalization. Carriage automatically goes down "all the way"—eliminating the problem of "floating capitals." (4) Training end fingers to use sufficient force is eliminated. Awkward reaches for end-finger and numeral keys are easier because electricity assures even impression from any reach.

With these difficult learning problems eliminated, beginning students learn key locations easier and faster. Speedy and accurate typing is achieved sooner, saving time for additional valuable production practice.

## Other electric typewriter dividends

One of the principal reasons electric typewriters improve results, teachers state, is that students begin actual typing sooner. Many dull drills are eliminated and students are inspired to strive for better quality classroom work. The very newness of electric typewriters contributes to improved results.

And for teachers, too, electrification means simplification. Using present teaching methods, time is gained for instruction on practical business typewriter applications. No special or new techniques are needed and no special teachers' courses are required.

With the electric typewriter, more graduates can be prepared for the best-

paying jobs. Schools with electrified typing rooms gain recognition from business and community leaders for progressive education.

## Easy electric-to-manual conversion

Acceptance of the electric typewriter for teaching typing automatically places "conversion" in its proper place. Elemental instruction is given on the easiest-to-learn machine. Touch, carriage return and other phases of manual typewriter operation which impede typing progress for beginners are readily practiced by trained students as a "finishing" class. These postponed learning steps are then easy.

## Low-cost BEA Plan now available

To help your school install a complete BEA electric classroom now, we are expanding our Business Education Advancement program.

By taking advantage of this low-cost plan your school can have rugged, full-featured Remington Electric Typewriters for as little extra as three cents per machine, per day. And you can pay-as-you-teach.

Get the full facts about this money-saving BEA plan, plus complimentary copies of the 16-page *BEA Guide to Simplify Electric Typing* (RE8612). Write: Manager Typewriter Education Services, Remington Rand, Room 1420, 315 Fourth Ave., New York 10, N.Y.



One of the many new Remington Rand BEA Classrooms. Picture shows new 15 machine electric installation at Greensboro H. S. where authorities state electric typewriters speed up and simplify both teaching and learning.

BEA—ANOTHER PROFESSIONAL  
AID FOR EDUCATORS BY  
**Remington Rand**

**With a modern home freezer  
in your laboratory,**

**and the benefit of this**

**NEW freezer**

**teaching kit**

**you can give**

**your students**

**real freezer training**



The home freezer is playing an increasingly important part in American homemaking. Last year, more than 1,000,000 freezers were installed. More and more students are requesting that freezing instruction be included in the home economics courses.

To help in the teaching of this subject, we offer the new Freezer Teaching Kit, described below. It is timely and helpful. It provides a means of visual instruction. It

helps the teacher make full use of the freezer itself. Of course, a freezer in the laboratory is a "must," because . . .

**YOU NEED A FREEZER TO TEACH FOOD FREEZING!**

If your school doesn't have a modern home freezer, your local electric light and power company, or electric appliance dealer will tell you how easy it is to have one in your laboratory.

**NEWEST WAY TO TEACH FOOD FREEZING!** The Freezer Teaching Kit makes it easy to provide effective freezer instruction. Includes 12 beautiful, full-color wall charts, and Home Freezer Teaching Guide. Absolutely FREE! Simply use coupon.

**FARM & HOME FREEZER SECTION**

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FARM & HOME FREEZER SECTION  
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New York 17, N. Y.

(Please check) School has . . . does not have . . . Electric Home  
Freezer in laboratory.

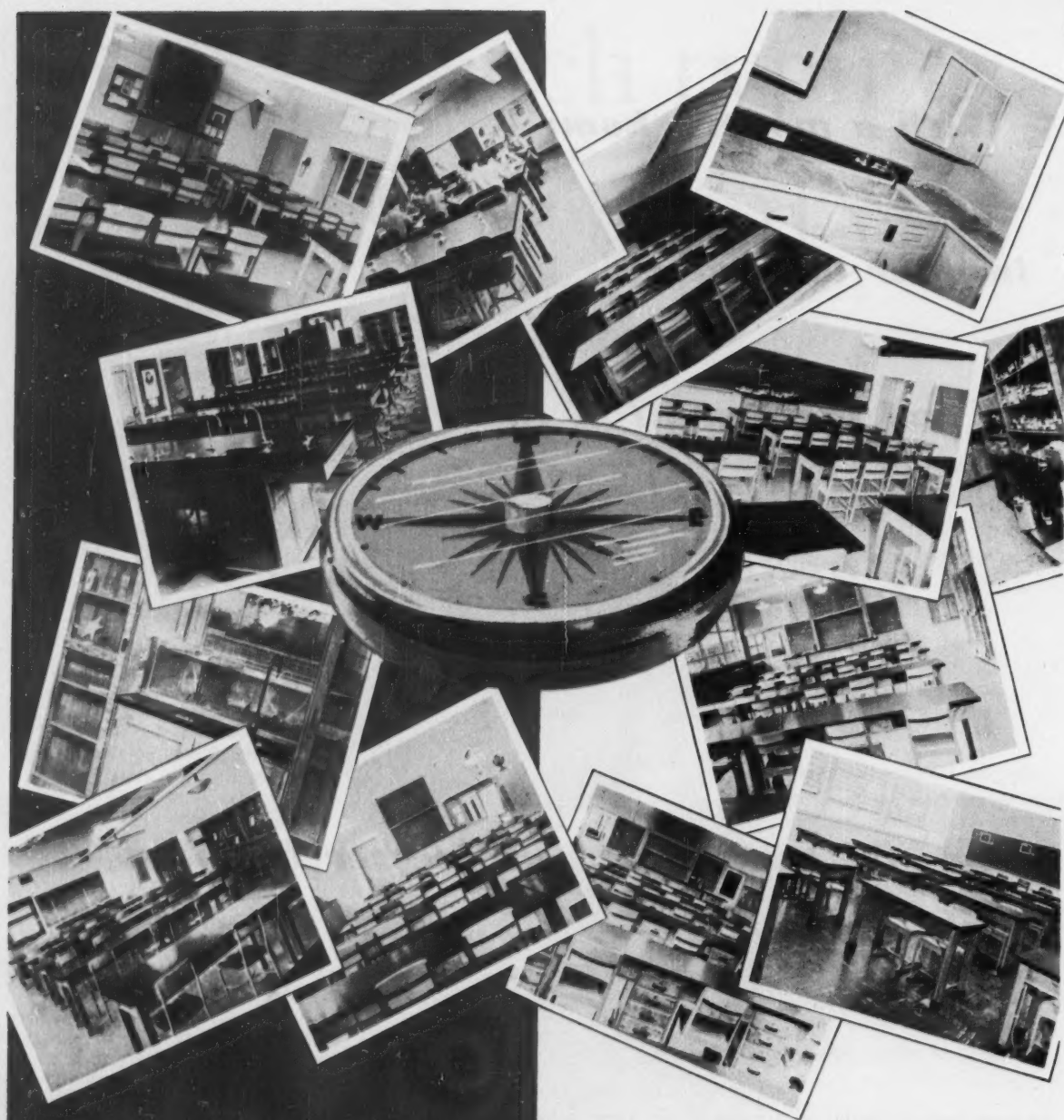
Please send, absolutely FREE, the new Freezer Teaching Kit to:

Your name and title . . .

Name of school . . .

Address of school . . .





School laboratories  
*"equipped by  
Hamilton"*  
are everywhere!

**T**hey're nation-wide! Hundreds of schools call on Hamilton for planning assistance and equipment, when remodelling their laboratories or building new. Performance reports are consistently *cum laude*. Suggesting that you, too—wherever you are, whatever your laboratory project, whatever stage your plans may be in—write to us at once!

*Hamilton Manufacturing Company*  
TWO RIVERS, WISCONSIN

# Looking Forward

## For Better Teachers

INSTEAD of concentrating our efforts on recruiting teachers and obtaining salary increases, we should give primary attention to making teaching a satisfying and socially rewarding occupation."

The words are those of Francis S. Chase, professor of educational administration at the University of Chicago, in the "Accent on Education" issue of the *Saturday Review* for September 12.

"Why," he asks, "does an occupation so crucially important to our society as teaching find itself in such a weak competitive position in the market for trained intelligence?"

One reason, he implies, is that the capable teacher seldom has freedom to operate in a truly professional manner. "The teacher," he says, "should have essentially the same kind of professional responsibility for a group of learners that the physician has for the care of his patients. Many teachers, it is true, do not have the professional competence to entitle them to such responsibility. Yet even the severest critics of our schools concede that there are many teachers of exceptional ability and unusual dedication to their work. Why not set these teachers free to teach?"

And what are some of the conditions for professional teaching?

First of all, "the teacher's work load and schedule must allow time for planning, for teaching without interruption, for attention to the individual needs of students, for counseling, for guiding student activities, and for conferences with parents. More important, the teacher needs freedom to plan his own work, to adapt learning experiences to the needs of his pupils, to try out new ways of attaining educational objectives."

Dr. Chase recommends that individuals "with less than four years of college and adequate professional preparation" be given the status of "teaching assistants." This, he believes, would be much preferable to giving such persons full teaching status under emergency or even regular certificates. He links this proposal, however, with the employment of highly competent professionals as "supervising teachers" or "chairmen of teaching teams."

The supervising teacher would devote most of his time to teaching, assuming special responsibility for those phases of instruction for which other members of the team lack competence. Each team could have one or more "teaching aids" to relieve teachers of much of the burden of clerical and routine duties.

The Chicago educator visualizes many ways in which these teaching teams could improve the outcomes of education and at the same time make teaching attractive and rightfully rewarding. Each team would have well defined responsibilities which it would coordinate with the responsibilities of other teams in a total educational program, with the assistance of a principal or general supervisor. One group, for example, might be primarily concerned with instruction in the primary grades. Another might be responsible for the high school science program.

Dr. Chase points out four values of the team plan: (1) It makes maximal use of available teaching talent. (2) It makes teaching more attractive to professionally qualified individuals. (3) It offers opportunity for promotion and higher salary without the shifting of teachers into administrative positions. (4) It helps partially qualified teachers grow by providing them with constant guidance and stimulation.

"The American public will demand and get a high level of professional competence," concludes Dr. Chase, "when schools are organized and administered in such way as to highlight the teacher's professional responsibility."

## Stevenson's Point Five

THERE'S a special message to education from Adlai E. Stevenson in his report on his recent trip around the world. During that five-month period he visited 30 countries, lands inhabited by nearly a billion people.

Ignorance and misunderstanding are the greatest dangers to world peace, says the former presidential nominee. Not that he believes Russia has changed its determination for world conquest or that he thinks we can achieve peace with a grand worldwide peace conference. But he does believe that "Asia's mind, for the most part, is open."

Democracy and communism are freely compared by Asiatic intellectuals, he reports, but with "little understanding of either. There is much to be done in Asia to demonstrate that the free way of life has more to offer the common man and that communism is a new imperial despotism."

"While we can give them needed help and counsel," he continued, "the long, slow job of Asian enlightenment must be done by Asians. To this end, our student and teacher exchange programs are highly effective."

The sinning, however, is partly on our side, in the opinion of Mr. Stevenson. In Point Five of his summary he suggests that there is much to be done in our public schools, in our universities, and in our adult education

programs to correct our own illusions and misunderstandings about the world. Said he:

"I sometimes feel that mutual misunderstanding is our greatest handicap and hazard. Ugly illusions about the United States are all too prevalent, but there is also a touching, moving admiration and wonder about big, brash, magnanimous America that talks tough and insensitively but sends money and friendly, earnest people everywhere to help.

"And our illusions about the rest of the world are just as serious: That we have a monopoly of energy, know-how, culture and morality; that other people live and think as we do—or should. But, if an illiterate Burmese peasant has an excuse not to understand America better, we Americans, with all the means of communication at our disposal, have none. So I am convinced that we must know more about our world to live up to the leadership that has been thrust upon us by circumstances."

### How to Say "Thanks"

A VOTE of thanks from the nation is due the Advertising Council for again preparing an assortment of suitable advertisements to be used on behalf of education. Special credit goes to the volunteer advertising agency, Benton & Bowles, for preparing copy that is attractive, pertinent and convincing.

The suggested advertisements vividly portray the need for more classrooms or point out how much public schools really mean to a community. But the messages do not end there. Every advertisement invites action by urging readers to find out what they can do. A booklet, "How Can Citizens Help Their Schools?" is offered.

As in previous years, the material has been prepared in cooperation with the National Citizens Commission for the Public Schools and the U.S. Office of Education.

There's more to be done, however, than merely saying "thank you" to the Advertising Council and to the agency that prepared the copy. School boards and administrators can encourage local advertisers to run these ads in local newspapers, and all of us can express appreciation to the advertisers in all types of periodicals that join in this campaign.

### That Green Stuff

ANOTHER panacea is debunked! High powered advertising almost had us convinced that chlorophyll—that green stuff in toothpaste, gum, soap and dog food—was the sure way to make a hit with neighbors, sweethearts and man's "best friend." Now comes the American Dental Association with shocking(?) news.

A panel of experts at the association's recent convention in Cleveland told the dentists that the claims of toothpaste and toothpowder advertisements are "increasingly exaggerated." Statements that chlorophyll derivatives are effective against human tooth decay are "pure speculation," said the scientists.

"Never has a substance been so exploited and prostituted by ridiculous applications," said Dr. John W. Hein, chair-

man of the department of dentistry and dental research at the University of Rochester.

We'll give you odds of 10 to 1 that television, radio, magazine and newspaper advertising will continue to make these extraordinary claims for chlorophyll dentifrices and children and parents will continue to believe them.

### For Administrators, Too

IT IS essential that the teacher have a rich and adequate life of his own, a balanced life, a life of value, free from frustrations and inadequacies," Gov. G. Mennen Williams of Michigan told an education convocation at the state university. Continued the governor: "To interpret the needs of young people, to help them in their search for individuality and self-fulfillment, the teacher must know himself, develop his own individuality, his own sense of self-discovery."

Essential as this may be for the teacher, how much more is it essential for the school administrator—as a teacher of teachers.

### Confucius Say

CONFUCIUS (551-479 B.C.) probably wouldn't recognize many of the quotations attributed to him. For instance, there's that overworked phrase about a picture's being worth a lot of words. The way we first heard it many years ago, the rate of exchange was one picture for 5000 words. Then, as technicolor and television appeared on the scene, the ante was raised to 10,000—then 25,000 words. The arrival of 3-D movies probably will spiral that ratio again, and Confucius will be credited with saying that a picture is worth 50,000 words.

There's another quotation attributed to Confucius that we think should be a motto for every college course in which a teacher enrolls. Salary schedules nowadays usually guarantee a teacher a raise in salary if he obtains additional college credits or receives another degree. Whether he learns anything really worth while in those hours he spends in summer school, extension courses, and evening courses makes no difference in the amount of salary increase he will receive.

These circumstances have produced a type of teacher who shops for courses that give the most credit for the least effort. Especially preferred is the course that is based entirely upon a textbook; it has an instructor who merely asks that students memorize what the book says, parrot it back to him in class, and then mimic it again in tests.

Courses that require original thinking, that expect an individual to relate what he learns to his own professional problems—and especially those courses that offer the student some opportunity to apply what he learns back in his own school—are studiously avoided.

To those teachers going through the motions but not the emotions of in-service training, Confucius say: "Learning without thought is labor lost; thought without learning is perilous."

*The Editor*

THE NATION'S SCHOOLS



**Boston survey offers solution to problem of**

## **OBSOLETE SCHOOL BUILDINGS**

**LEO BARRY**

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**F**ACED with tremendous school building problems, the Boston School Committee decided this year to play history and tradition against themselves by calling upon the Center for Field Studies at the Harvard Graduate School of Education to conduct a buildings survey.

The result was a careful, comprehensive appraisal of one of the city's greatest problems—bringing Boston's schoolhouse facilities up to date. Recommendations featured abandonment of 58 elementary and junior high schools and erection of 30 new schools between 1955 and 1960.

Other recommendations were for a coeducational pattern extending through the secondary schools and for a clear-cut adherence to the city's policy of a 6-3-3 grade organization.

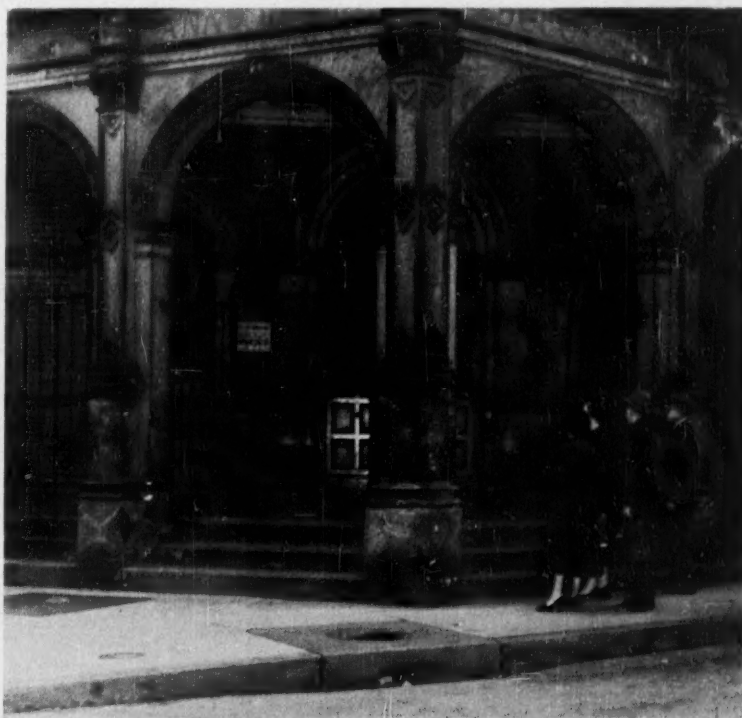
The survey team found the typical Boston school with a site of less than an acre. Lighting provisions, toilet facilities, playground equipment, and heating arrangements in many schools told a story of obsolescence.

### **ADMINISTRATORS HELPED**

School administrators on leave played an important part in this undertaking. Harvard was engaged in the inaugural year of a new program in educational administration which provides administrators on leave with opportunities for the making of decisions and the solving of problems in actual administrative situations of increasing complexity. As a result the Boston School Committee found that it received not

only the professional services of the regular staff of the Center for Field Studies and numerous consultants selected by Harvard but also the assistance of 22 men and women represent-

ing a highly selective cross section of American educators. About one-half of them were administrators with several years' experience in the field, many of them granted leave of absence and



A survey team arrives at the Mayhew School. Its members found that the school was operating at half capacity because of the condemnation of a boiler and the consequent closing of the third and fourth floors. The team recommended that the school be replaced by a new building.

part-time salary by their own school systems.

**First job—get all the facts.** Population predictions, age distribution, allocated births, parochial school influences, estimated school enrollments, public housing units, industrial and commercial developments, and highway planning were studied as a documentary background for this intensive survey of an historic city struggling to meet its present day educational obligations.

In the four-month period that followed, this composite staff from the Center for Field Studies literally invaded the city of Boston. Working in two-man area teams, assigned by census tract, staff members produced a comprehensive array of statistical findings later translated into meaningful trends and practices. Each of Bos-

ton's 221 public school buildings received a thorough inspection from roof-top to boiler room.

Boston has a population of some 800,000 people, covers an area of 43 square miles and includes 12 district suburbs in addition to the city proper. These basic statistics have a certain arithmetical compactness that appears to make easy the necessary estimation of school enrollments upon which any building study is predicated. Such is not the case, however, in a city like Boston, where a large number of children attend nonpublic schools and where attendance lines are not too strictly followed. School enrollment figures are not always truly representative of a given geographic area. As a result it was decided that the United States census data would be used as the primary source for predicting

school enrollments, and the staff of the Center for Field Studies gave its initial attention to the 156 census tracts which comprise the city. Fortunately, Boston had available allocated births by census tract, which permitted a reduction of the total prediction problem into these smaller units.

**Population relocation makes picture complex.** Here again the relatively simple process of translating census figures into population and birth estimates for any given age group or year was complicated by several factors typical of the postwar developments of a major American city. It was found, for example, that Boston has 33 federal, state and city public housing developments in operation, with an additional seven under construction and six more in the planning stage. Such construction means an

Members of the staff of the Harvard Center for Field Studies leave their Boston School Plant Survey headquarters to spend the day inspecting the city's schools. The staff of more than 30, of whom 22 were school administrators taking graduate work at Harvard, inspected more than 50 special features of the 221 public schools.



appreciable relocation of total population and a corresponding dislocation of school age population.

In addition, Boston has a vast number of private and public institutions where adults of child-bearing age are recorded in the census records on the basis of temporary rather than permanent residence. This fact requires a constant "translation" of the census data for any given tract. Similar adjustments were found necessary for the large number of nonpublic schools, principally parochial, which draw sizable numbers from all districts of the city. Add to these statistical complications the ever-present problem of gauging secondary school "drop-outs" and it will be seen that the foundation for this Boston building study was, indeed, a complex one.

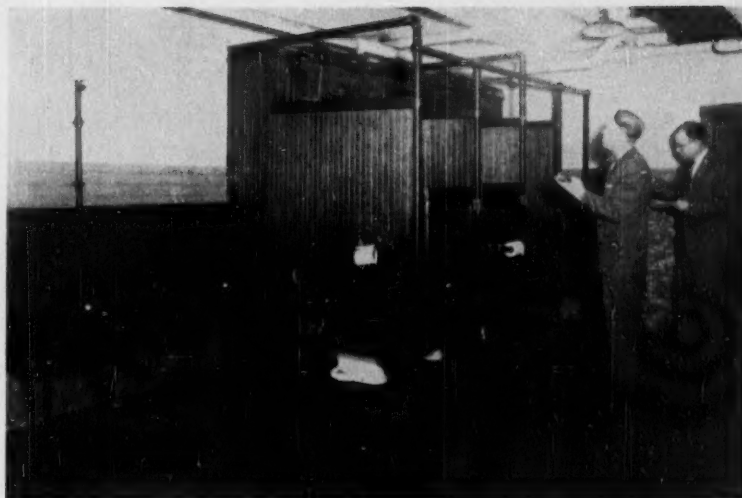
**Firsthand inspection is essential.** No meaningful building study can be made without an appreciable amount of "leg work." For purposes of learning the city, studying the geographic and economic detail of the various districts, and visiting the 221 public schools of the city, the survey staff was divided into 15 area teams. Each of these areas, coinciding with the city's "health and welfare" boundaries, was in turn made up of a specific number of census tracts.

#### CENSUS TRACTS USED

Each of the survey teams was responsible for a firsthand working knowledge of every aspect of a given area which pertained to the interests of the study. Use of census tracts and area boundaries served throughout the study merely as demarcation "tools" for the purpose of reducing the vast area of Boston to manageable proportions for the intensive study. Great care was taken, however, that final analyses and recommendations should not be handicapped by the occasional artificialities of these small units of measure.

Survey inspection teams compiled significant data on every public school building in Boston. Their findings included, among other items: the type of heating, construction, ventilation, roof, stairways; the size of classrooms, auditorium, site, window area; the amount of artificial lighting, tackboard space, fire protection, and play area; the condition of floors, sash, walls, ceilings; the use of basement, grounds, corridors.

**Profile of schools given to the public.** Such data, of course, served



"The toilets of the typical school," says the Harvard Report, "are all located in the basement. Because this condition is so widespread, it would be impossible to replace these with comparable facilities on each floor. The city should, however, give close attention to porous basement floor surfaces and to ventilation of the present toilet areas."

as an authoritative basis for all later survey recommendations. They also enabled the drawing of an average Boston school "profile" showing taxpayers, for example, that the typical Boston school has a site of but from one-half to nine-tenths of an acre; that it was built between 1900 and 1920; that its steam-heating furnace uses coal, shoveled by hand; that classrooms have fixed furniture, with lighting facilities of less than 20 foot-candles; that toilets are located in poorly ventilated basements; that drinking fountains are generally found in the same sink used for handwashing; that limited recreational facilities offer only one chance in 40 for baseball to be played at school, only one in 10 for softball.

#### PROBLEMS INTENSIFIED

In any large city survey of school buildings the elementary schools frequently offer less complex problems than do the secondary schools. This was true in Boston. However, factors peculiar to the local situation intensified the secondary school problems here. For example, an established school policy in Boston called for a K-6-3-3 organizational pattern. Yet junior high schools, which Boston refers to as the intermediate schools, are not consistently maintained. Some areas of the city offer no junior high schools at all; numerous elementary schools include one or more eighth

grades, and one area, possessing three junior high schools, also has four elementary schools running 3-8, 4-8, 5-8 and 6-8 respectively.

On the high school level the Boys (public) Latin School, the Girls Latin School, and the Brandeis Vocational School contain Grades 7 to 12, with the other eight citywide high schools being straight four-year schools. Of the 12 "area" high schools (those schools serving a limited geographic section) in the city, only four are actually three-year high schools.

In addition to these irregularities of organizational pattern certain "citywide" high schools draw heavily from particular areas of the city, while in turn some "area" schools enroll numerous pupils from other parts of the city. The great majority of the city's high schools have not been operated as co-educational institutions. In terms of age, the citywide schools date from 1872 to 1928, while the area high schools were built between 1900 and 1934.

#### REPORT PRESENTED

In April the Harvard Center for Field Studies presented its formal report at a series of open meetings of the Boston School Committee. The printed report, "Look to the School Houses . . ." is an illustrated, 12 by 16 inch brochure, containing, in addition to a prose portrait of Boston old and new, a careful explanation of the





Lyceum Hall, which was built in 1839, is scheduled to be abandoned immediately as a public school. The building is located on a small plot of ground on the only street that leads to a fire station and two other schools. The boys and girls who attended school here had to play in this street during their recess periods.

nature, scope and methods of the study.

**Safer access to school answers traffic problems.** The report calls sharp attention to the whole problem of "traffic hazards," not uncommon to large cities on the eastern seaboard. "A major problem . . . is that of hazards which a city such as Boston presents to children, almost irrespective of where they live, as they go to and return from schools. We would not suggest that small children be forced to cross these hazards to attend school, but the present situation, including lack of exact data, makes the use of hazards as boundaries impossible. Should such exact data on hazards become available, we suspect that the implications would be that Boston might find the need for a school building on many additional residential blocks within the city. Certainly the ever increasing numbers of vehicles using the highways and streets of Boston create dangerous conditions for children. Since this condition exists and cannot be resolved by either method of anticipating and controlling school enrollments, the city might better devote special efforts to providing safe access to schools. The alternative is a tremendous new school building

capital outlay program or a useless risk of life."

There follow then the results and recommendations of the 15 area studies. These include, in addition to detailed "school location" maps, enrollment estimates through 1960; a description of salient physical and economic features of the area; data on existing schools, and recommendations for abandonment, repair, renovation or new construction. This section, concerned exclusively with elementary and junior high schools, presents a general summary table indicating some 58 abandonments, with the erection of 30 new schools called for between 1955 and 1960.

**Offers premises for high school changes.** In the next section the report deals with the high schools of Boston, carefully analyzing the philosophy of secondary education on which all recommendations were based. Here the Center for Field Studies found it advisable to point out that the location, size and use of any high school building can be adequately determined only in terms of the educational policies and intended functions of the particular school. Its own recommendations, it explains, were made on the basis of a number of educational

premises which it hopes "will stand as facts, even as standards, in the common-sense view of the majority of parents and citizens in Boston."

Among such premises are the following:

"That there is no evidence that children who are segregated into separate schools at the high school level by differences of sex, of economic, social and ethnic backgrounds, of vocational aspirations or intended careers become developed more highly as human beings or live more constructively in their adult years than those who during adolescence and their high school years mingle with others in the same school buildings. Common sense clearly suggests that the reverse is true.

"That a high school policy and pattern for a great city in this second half of the Twentieth Century makes most sense, which [therefore] seeks to approach the goal of a comprehensive program serving the entire range of the population by providing:

"A. A limited number of citywide specialized schools which encourage a policy of admission resulting in a reasonably balanced distribution from all sections of the city.

"B. A series of highly specialized vocational courses apportioned among

all of the area schools located in various parts of the city and open to students from the entire city.

"C. A series of area high schools with comprehensive programs, except as limited by A and B. In these schools a major effort would be made to integrate the school life of those students from other parts of the city who are attending the specialized vocational courses with that of the local student body.

"To the extent that such a city might need to provide physical facilities for its specialized citywide schools, it should seek to locate these on a common campus, reasonably accessible from all parts of the city. Specialized programs might then be offered within each of several high school units, but the whole could be so operated that those learnings which all students of this age group need may be experienced in common."

Once the major premises are established the report goes into detail concerning recommendations for the abandonment of certain buildings, the conversion of others to junior high schools, the combining of three vocational schools for girls, the establishment of coeducational patterns, and the expansion of a clerical high school to a citywide junior college. In each instance the educational premise preceding the recommendation is explained in detail and documented by reference to educational research.

#### CITIZENS GRATEFUL

Upon release of this "Harvard Report," as the study is popularly known, Boston's citizens and their newspapers generally appeared grateful for such a careful appraisal of one of the city's greatest problems.

**Boston holds to 6-3-3.** The proposal to adhere closely to the city's policy of a 6-3-3 grade organization created some stir. It was the suggestions, however, for combining the two famous public Latin schools into a single coeducational three-year high school, the establishment of numerous area junior high schools, and the erection of a new citywide, comprehensive high school leading to the closing of such landmarks as Boston English School, Girls High School, and Technical High School which came closest to precipitating a mild tempest in the Boston teapot. Loyal alumni rallied to the support of the "threatened tradition and heritage" of "the first and greatest public schools in America"; a

few petitions were unfurled, and an occasional protest meeting echoed in assembly halls.

Then with the closing of schools in June the flurries of protest ceased abruptly. There was reason to wonder for a time if the report had engendered sufficient public concern to guarantee the advocates of better schools for Boston "their day in the sun."

But on July 7 the answer came in the form of a majority vote of the Boston School Committee calling for the closing or consolidation of some 22 elementary and high schools by September 1953.

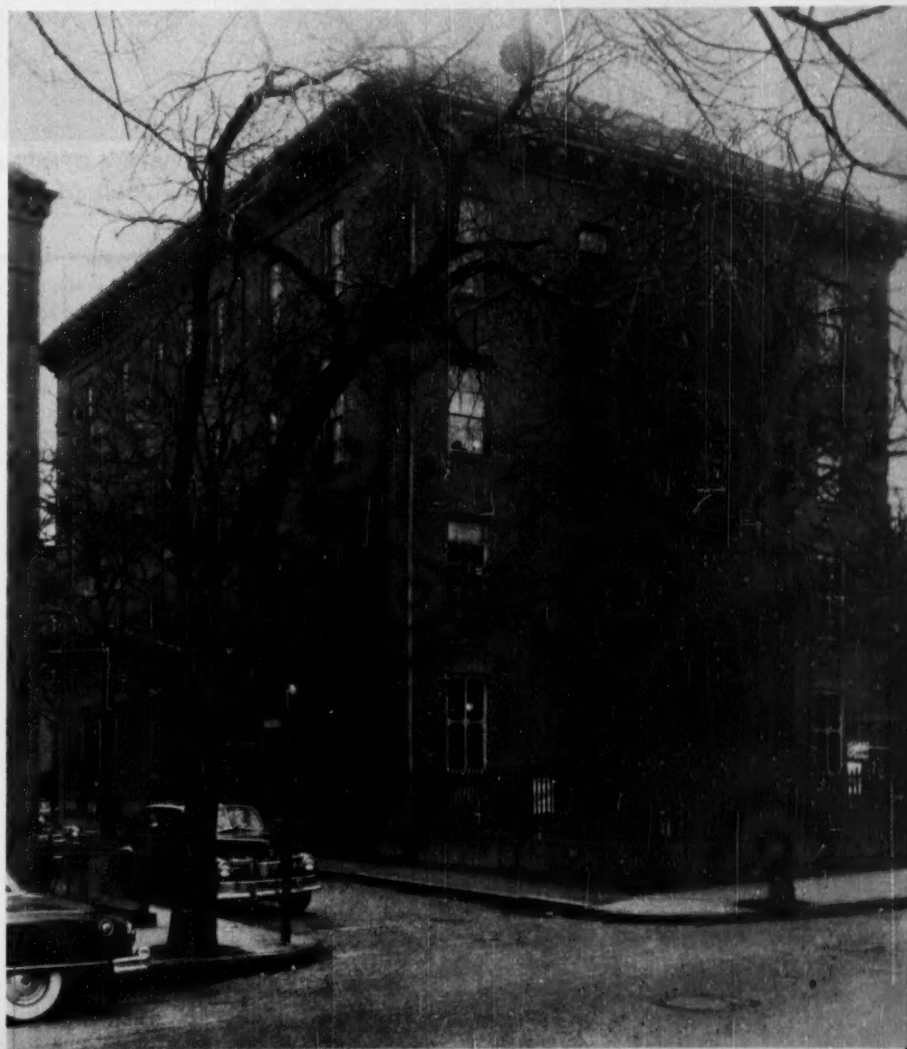
This action, fulfilling all recommendations for 1953 made by the "Harvard Report" (except for the consolidation of the two public Latin schools), will, it is expected, save \$900,000 for the city of Boston. Although changes were effected "without the loss of a single

job," the school committee estimates that 5608 pupils and 274 teachers were involved in the transfers.

The acceptance of Harvard's recommendations for 1953 constitute the first stage in the development of a sound building program for the city of Boston. It is now hoped that additional changes, including new construction, which the report has scheduled for 1955 and 1960 will meet with equally favorable response.

Whether or not recommendations of the study are followed in toto, there can be little question that the city of Boston now has available a clearer, far more comprehensive picture of its public school buildings than it has had in modern times. What is equally certain is that Boston had the full-time services of a nationally representative staff of school administrators "looking to" its schoolhouse situation.

**The Franklin School, a four-story building with frame interior and wooden stairs, cannot now be abandoned but should be replaced by 1955, the Harvard Report says. This Boston public school was built in 1857.**





Art students prepare posters advertising the annual meeting.

**Students prepare  
for citizenship by**

## **PREPARING THE BUDGET**

**JAMES H. CULLEN**  
Administrative Assistant  
Central School District No. 1  
Suffern, N.Y.

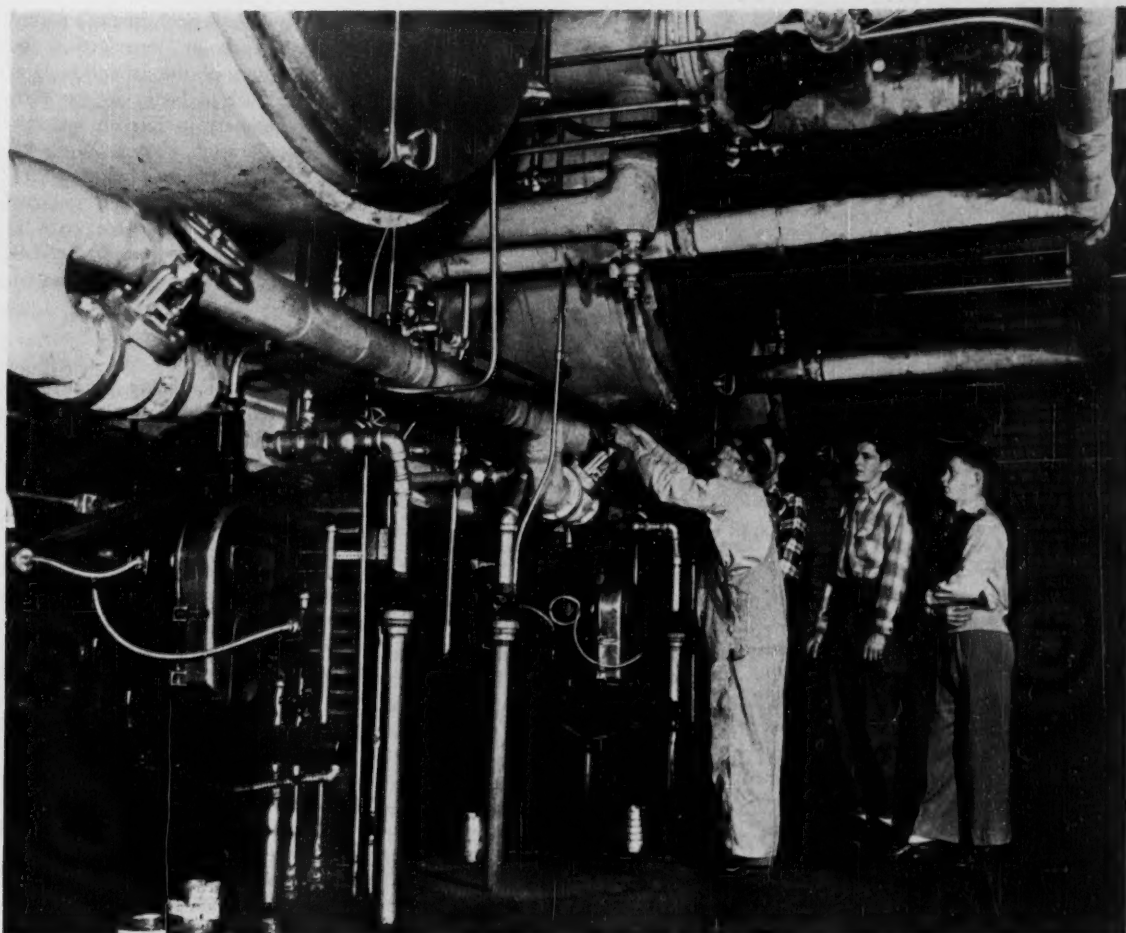
**W**HY is it that, although education is a public charge and a good percentage of our population has at one time or another been in attendance at a public school, the fact still remains that education must be sold to the public?

Whether it is for just an ordinary school system, or one with adequate facilities, an enriched program, and a qualified faculty, budget time is still a source of headaches for the board of education and of a good case of jitters for the superintendent. Perhaps those who are most concerned with the development of the school budget are also responsible for the continued need of conducting a publicity campaign for its adoption.

In common with many schools throughout the country, Suffern High School has made use of assistance and advice from lay committees and has found the practice worth while. Though accepting the ultimate fiscal

The NATION'S SCHOOLS





High school students at Suffern, N.Y., are gathering material on the operation of the school plant as a part of their active participation in budget preparation.

responsibility, school officials have welcomed the assistance of a larger council of adults in the planning of the financial affairs of the school for the succeeding year.

However, while faculty and lay committees were being formed this past year to work on the proposed budget, teachers and administrators began to think of how more student participation could be utilized. Teenagers, who will soon become property owners, voters, parents and even members of citizen committees, should be the ones to benefit most by active work in budget preparation and thus learn more about public education through working directly on a part of it. Thus, an insight into the business end of school operation can be presented as a start in the education of future citizens concerning what this phase of education involves. First-hand experiences with actual budgets, taxes and costs investigated for a real

reason allow for a possible greater carry-over when the students of the present become the public of the future. While all of the material covered may not be remembered, a positive concern with understanding attitudes can be developed, and these impressions last longer than mere fact peddling.

Conceivably, too, the students may develop an increased respect for school property when their investigations reveal the cost of painting lockers and walls, maintaining school grounds, and purchasing books, supplies and equipment. Also, it was thought that the students could be of real assistance in presenting the budget to local citizens. It was not our intention to use the students as labor, for the additional planning required in the preparation of units is more demanding of time than if the job were done by a faculty-lay committee. But, in addition to the educational benefits to be

derived, students are capable of starting and developing good ideas for the final budget presentation. Too, the motivation created by working on a real, current problem creates a continued interest which unquestionably is carried home, and good groundwork is laid long before the annual meeting is even called to order.

#### SETTING UP THE PROJECT

Knowing that various aspects of public education, general budget preparation, the tax structure of our nation, and similar areas were being developed in many departments of the school, a faculty chairman set about seeing how all of these could be brought together in a concentrated study. Teachers from all subject fields met and suggested ways in which their classes might study the problems of public education and how students could be given the opportunity to work directly on the proposed budget

of their school district. After these preliminary investigations were made and teachers were ready to introduce the appropriate parts of it to their classes, an outline was set up:

1. Nature of the Project: To teach about public education.

2. The Purpose: To develop understanding attitudes and to disseminate information regarding education and the public school. To stimulate interest in the public school system as an integral part of our American democracy.

3. The Method: To analyze all of the possible areas of the school budget which would be adaptable to classroom teaching units. To determine the subject field in which these areas could best be covered. To have coordinator and teachers of selected courses meet to develop budget areas more specifically and to establish teaching units. To prepare a time schedule for the starting of the study of each area in the proper sequence.

This outline was then examined by the staff, and it was decided that the following areas would be covered by the respective classes:

1. Background: Education is a fundamental responsibility of the citizens of a democracy; education and schools

are necessary. Citizenship education and English classes.

2. Who pays for education: sources of revenue, tax assessments, rates and collection, state aid. Citizenship education, business education, and English classes.

3. How much it costs to operate a school: the budget, definition of terms, how the budget is made up. Business education classes.

4. How the budget is presented to the people: newspaper, preliminary hearings, the final report form. Citizenship education, English and art classes.

5. What the budget report includes: report from the board of education, the theme, the budget, other pertinent data. English, business, art and mechanical drawing classes.

6. Annual meeting: the school law, attendance, the presentation. All classes.

A tentative schedule with dates was prepared. Five areas were included under the headings of: (1) introduction and understanding of the school budget; (2) theme and presentation form; (3) final preparation; (4) advertising; (5) annual meeting. The last four of these areas were primarily designed to include actual work on the printed form of the proposed

budget and the school district's annual meeting. Work on "introduction and understanding of the school budget" was scheduled to begin in the early part of February in English and citizenship education classes. Work on Area 2, "theme and presentation form," began a week later and was followed by work in the last three areas as soon as the students had absorbed enough "basic training" in public education.

#### WHAT WAS DONE

After the preliminary groundwork was covered, the lesson plan for the first area continued with an introduction of facts. It dealt specifically with the problem of "Who pays for your education, how is the money collected, and what does the money buy?" Past budgets as well as the new tentative budget figures were examined by students, and the general discussions which followed included a definition of budget terms, how the budget is made up, and where the items and figures come from. Resource persons such as the superintendent of buildings and grounds, the director of health and physical education, the chief custodian, the high school principal, and others were called into the classroom to explain the various budget items. "Gee whiz" was a commonly heard expression when the price was given

Business classes and bookkeeping groups studied charts on fixed charges. These charts had been made by students in the mechanical drawing classes.



for one desk and chair unit and the number that had to be purchased, the yearly cost of paper towels, or the price of a regulation football.

While this and other material were being collected, English classes were assisting the students in acquiring a background knowledge on the present philosophy and progress in education in the United States so that they might see their work on budgets and local school problems in its proper perspective. Students were encouraged to read from any source available, and several educational periodicals were placed in the classroom.

This led to the annual school meeting. The group's work centered on the report to the people and a search for a suitable theme for such a presentation. Discussions led to "What theme 'areas' might appeal to the public?" and resulted in such suggestions as: "How You Can Help Us to Have a Well Balanced Education," the ever-increasing population of the school district, "Why Is Education So Important?" "The Thruway of Education," "What You Should Know About Your Schools," and possible methods of illustrating such ideas. The theme finally used was "What Is Our School?"

In the meantime, the business and bookkeeping classes were having their heyday. Much of the theory of budget-making had been covered in past years by these classes, but the opportunity to put direct work on this proposed budget made the study more meaningful. They too made full use of past budgets and all of the figures that had been assembled for the new one.

#### FINAL PREPARATION WORK

Although similar material was studied at other grade levels as an offshoot of a larger unit on local communities, the work of the senior grades was ready for the final screening. Students in secretarial practice classes, most of whom had done work in English, business or citizenship education classes on the theme and learnings in general public education, could now step in to do typing and assemble data for the printers. Concurrently some English classes worked on page and section layouts.

Using data collected in other classes, mechanical drawing students were able to make up charts and graphs for a section labeled "Facts and Figures" to supplement text and figures in the



The date on the cornerstone of the high school building is the take-off point for student study of the area of debt service in the school budget.

printed budget. About the same time, variable graphs were made from pressed wood and plywood by shop students for use in visual display advertising and to illustrate talks made to citizens groups about the forthcoming meeting.

One of the regular lessons included in the art program is making display posters on some preassigned subject. The school budget and the annual meeting, however, not only presented the usual problems in poster advertising but also contained the added values of working on a realistic subject. The messages, dramatically illustrated on large posters, read, "How Much Is Your Child Worth?" "We Want You—Will You Be There?" "How Much Does Education Cost?" These and many other similar headings were designed to encourage attendance at the meeting. The posters were displayed at the preliminary meeting on the budget, at the school's "open house" which precedes the annual meeting, and in store windows and banks in the community.

As the date of the meeting drew close, secretarial practice students typed and mimeographed letters to all residents in the district, urging their attendance at the annual meeting and offering the services of home economics students who would serve at no charge as baby sitters at the homes of parents who desired to attend the meeting. At the same time, students in all classes were encouraged to attend the meeting to see the actual practice of many of the things they had studied.

Faculty and lay committees should be constantly reminded that budget work, according to law, is a responsibility and duty of boards of education and that no conscientious board would ever desire to delegate any part of this responsibility. Similarly, any students working on a unit of this type must be made aware of these facts. Thus, anyone participating is doing so in a purely advisory capacity and should realize that his ideas may be changed or ignored by persons elected by their peers to do the job because they are adjudged to be capable of doing it. On the other hand, this should not preclude the possibility of students and/or adults participating and assisting in budget preparation. Indeed, valuable contributions may be received from both.

#### PRACTICAL VALUE

Naturally, some students were disappointed because their ideas were not all used in the actual printed budget; however, these were filed for reference for future work of this kind. Even so, student evaluations were of a positive nature, and most stated that they enjoyed the work and could see its practical value both now and in the future.

The value to the students of acquiring the background learnings in public education that should be a part of the equipment of all citizens in American democracy will, in itself, make work on this type of project extremely practical and valuable. From post-project evaluations made by both students and teachers involved, this would seem to be the value best realized.



## Through state commission and county boards

# South Carolina Reduces School Districts

from 1559 to 103 units within two-year period

**W. B. SOUTHERLIN**

Supervisor, Schoolhouse Planning Section  
South Carolina State Educational Finance Commission

WE WILL never be able to give the boys and girls in the rural section of the state the school buildings and equipment to which they are entitled as long as these facilities are furnished only by the taxes on the real property of the school district. Funds spent for school buildings by local governments should be supplemented by a state building program. This program will involve the issuance over a period of 20 years of bonds to provide \$75,000,000 for school construction, which should begin as soon as the national emergency permits. I shall submit a special message to the general assembly as to this program."

In these words Gov. James F. Byrnes spoke the feeling of his fellow citizens in South Carolina in January 1951. He had thought through the problem and had an outline of action for attacking the problems of education in South Carolina.

Furthermore, said the governor, "while we have done much, we must do more. It must be our goal to provide for every child in the state, white or colored, at least a graded school education. We must grant an increase in the pay for school teachers, and we must improve our school transportation system."

When Governor Byrnes spoke these words in 1951, more than 1559 school districts existed in South Carolina. Today the entire state has only 103 school districts. How this happened and what it represents in terms of educational progress are the story told in this series of articles.

An act passed by the general assembly of 1951 upon recommendation of Governor Byrnes set forth certain

provisions for the improvement of facilities for the educational program in South Carolina and created the South Carolina Educational Finance Commission. This commission is composed of seven members, five of whom are appointed by the governor by and with the advice and consent of the senate and no two of whom may come from the same congressional district. The appointments are staggered so that one member is appointed each year for a term of five years. The other two members of the commission are the governor and the state superintendent of education.

### COMMISSION APPOINTED

The governor appointed members to the commission shortly after the act was approved by the assembly. On May 7, 1951, E. R. Crow, superintendent of Sumter city schools, was appointed executive director of the commission. With the help of several committees at large, he recommended the following criteria, which were approved by the commission on July 16 and are now used as the guiding principles for an unprecedented consolidation of schools throughout the state:

"1. *Elementary schools shall be so planned as to have sufficient enroll-*

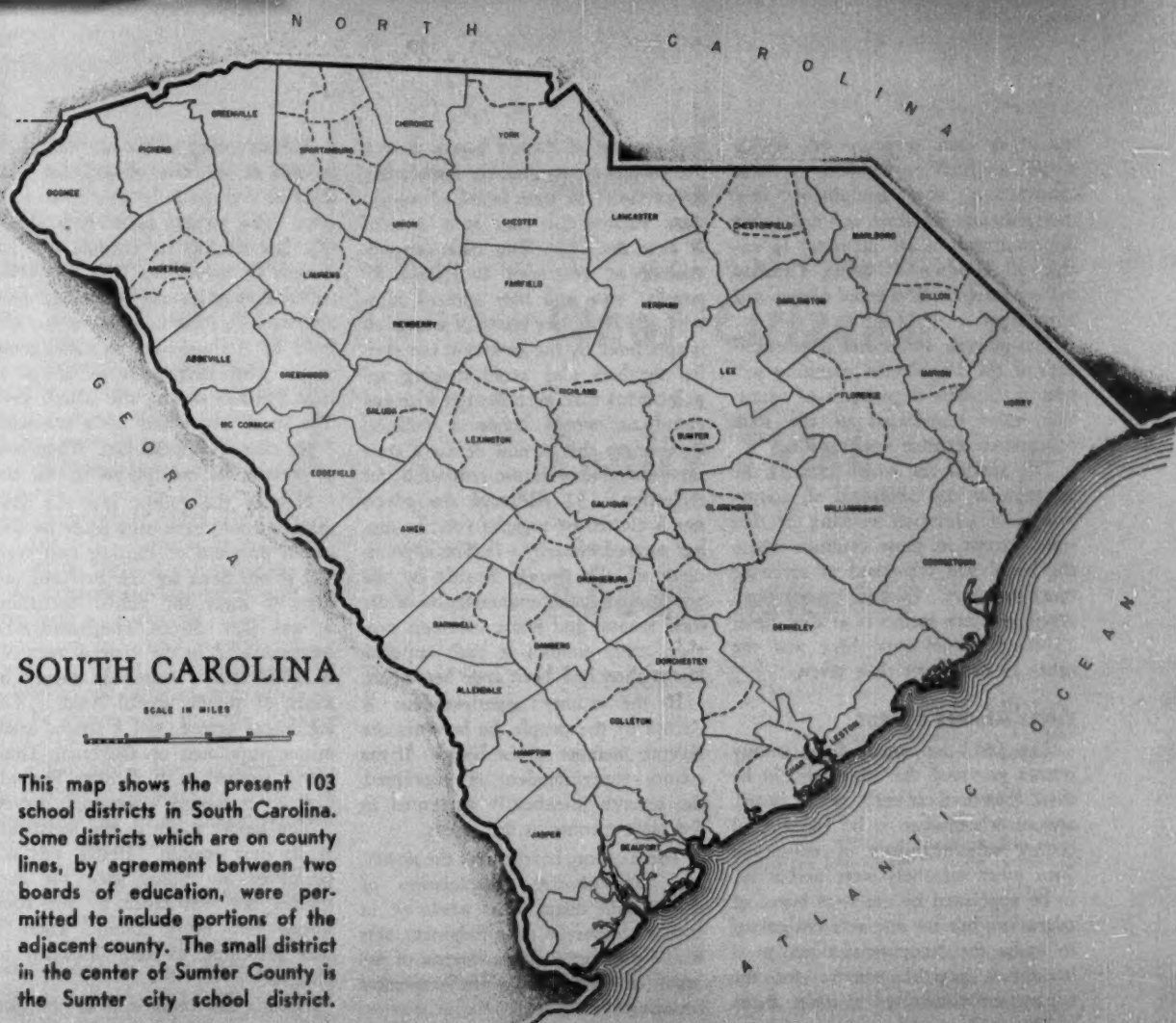
*ment to provide a teacher for each grade taught, except in those cases where natural barriers, sparseness of population, or other reasons make the application of this requirement unwise. Separate elementary school districts must be consolidated with high school districts.*

"In rural areas where long distances are involved, consideration should be given to the possibility of establishing community primary schools for the first three grades. This accomplishes two purposes: (1) It keeps a school in the community, and (2) it eliminates the necessity of transporting small children such great distances. A three-teacher primary school for three grades is in accord with this principle.

"2. *Inefficiency of operation and inadequate educational opportunities are caused by small enrollments in many of our present high schools.* Recent studies show that in high schools with enrollments of from 50 to 100 the per pupil cost is 53 per cent greater than in those with enrollments of 200. New high schools should have a minimum potential enrollment of 250 in Grades 9 through 12, with the same exceptions as listed previously for elementary schools. In cases where the state board of education has recognized a high school as being accredited, or is in the process of accreditation, the term 'new high school' will not apply.

"3. *Each school district (administrative unit) shall provide high school facilities within the district for both races.* In some instances this will mean one high school for the minority race and two, or more, for the majority race. The essential requirement is





## SOUTH CAROLINA

SCALE IN MILES



This map shows the present 103 school districts in South Carolina. Some districts which are on county lines, by agreement between two boards of education, were permitted to include portions of the adjacent county. The small district in the center of Sumter County is the Sumter city school district.

that administration of school facilities for both races be under the control of the same board of trustees. Counties operating under the county unit system meet this requirement. Other counties must reorganize into administrative areas large enough to assure a sufficient number of educable students of each race to maintain a high school for each race. Consideration should also be given to the principle of equalizing taxable wealth in the school districts. An area with a small proportion of the children to educate should not be created in such a way as to possess an undue proportion of the taxable wealth of the county.

"4. In many instances reorganization of administrative units (consolidation of school districts) can best be effected by disregarding county lines for school district purposes. Nearly every county will have small border areas where children have been attending schools in the adjoining county. School districts should conform as nearly as possible with the natural

socio-economic boundaries of a community. County boards of education of adjoining counties should meet together and work out desirable consolidations where overlapping occurs.

"Reorganization of administrative units (consolidation of school districts) is the first step to be taken by county boards of education since it is the reorganized district that will be eligible for school building aid. No individual district can apply for and receive funds until the over-all plan of reorganization for the county has been approved by the commission. Counties which have undergone reorganization in recent years should reexamine their situation in the light of the preceding principles adopted by the commission."

The regrouping of those more than 1559 school districts into 103 units within the last two years was accomplished through authority delegated to the South Carolina State Educational Finance Commission and a new type of county board of education. To

carry out its wishes, the general assembly for South Carolina gave the commission powers to "prescribe and promulgate reasonable rules and regulations" and stipulated further that "such rules and regulations shall have the full force and effect of law."

This commission, said the lawmakers, shall:

1. Promote the improvement of the school system and physical facilities of the same.
2. Make plans for the construction of necessary school buildings.
3. Make surveys incident to the acquisition of sites.
4. Effect efficient operation of school transportation.
5. Effect desirable consolidations of school districts throughout the entire state.

6. Make provision for the acquisition of such further facilities as may be necessary to operate the public school system in an efficient manner.

The commission also was instructed to make a survey of the entire school

system as soon as practicable which would set forth such needs as: new construction, new equipment, new transportation facilities, and such other improvements as are necessary to enable all children of South Carolina to have adequate and equal educational advantages.

The powers, duties and responsibilities of the schoolhouse planning section of the state department of education were transferred to the state educational finance commission.

The special act which created the commission also abolished all county boards of education existing at that time, except in those counties where the board was composed of seven or more members. Thirteen counties had seven or more members at that time; 22 counties had only three, and the other 11 had fewer than seven.

### THREE-MEMBER BOARDS

The 1897 law establishing county boards provided that there should be three members on each county board, one of whom was to be the elected county superintendent of education. Two other members were authorized to be appointed by the state board of education, but no one was designated to make the recommendations, so it became a general practice for the county superintendent to make them.

The method of appointing county boards of education in the 13 counties varied, but the approval of the simple majority of the county delegation was necessary before appointment could be made by the state board of education. Since these counties did not have their boards of education abolished, it seemed to indicate that the desire of the legislature was to provide a more representative group by making it necessary that each county board have at least seven members. The same principle of simple majority approval by the delegation exists in the new law, except that the state senator's approval is mandatory and is not lost in a simple majority as was the case in the 13 existing counties with seven or more board members. This method of appointment, from the school administrator's point of view, is far from ideal, but it is an indication of progress toward the day when the schools will have the counsel of those with no political obligation to fulfill. Those boards that survived the act of 1951 had no relation to large districts or cities.

Another striking change in the

appointment of county boards is that the governor now does the appointing rather than the state board of education. Factors that may have entered in here are: (1) The state superintendent of education is elected by popular vote and may succeed himself. (2) The state board of education is appointed by the governor, but even its members may avoid making appointments that, even though wise and expedient, would create a political atmosphere that would defeat a state superintendent's future ambition for reelection. (3) Although the governor is elected by popular vote, he cannot succeed himself. (4) The appointment of the county boards by the governor upon recommendation of the local senator and house members provides more counsel in such appointments than had been true heretofore.

If the county superintendent is elected by the people, he becomes the seventh member of the board. If the county superintendent is appointed, the seventh member is appointed in the same manner as the others.

These county boards have the power, too, to authorize consolidation of schools and districts, in whole or in part, whenever, in their judgment, this would promote the best interest of the cause of education in the respective counties.

### \$20 PER CHILD

The general assembly recognized the constitutional mandate of the state which set forth in Section 5 of Article XI that "the general assembly shall provide for a liberal system of free public schools for all children between the ages of six and 21 years." It further recognized that to assure equality of educational opportunity for all such children in respect to the schools and school systems, adequate school buildings, properly equipped, must be maintained throughout the state. It further recognized that this burden could no longer be borne in its entirety by the respective local taxing units and that a system of state aid for school buildings should be instituted. However, in the "Declaration of Policy" is a clear statement that "the general assembly, therefore, determines and declares that the responsibility for the maintenance of adequate physical facilities in the public school system of the state is a responsibility both local and statewide in nature."

Aid according to the act was to be granted at the rate of \$15 for each child in average daily attendance each year. The general assembly modified this law during its current (1953) session by providing \$20 per child on enrollment instead of average daily attendance. Also, enrollment was defined by the assembly to mean those pupils who have been in school at least 35 days during the school year. The funds are raised by a statewide 3 per cent retail sales tax. There are, at present, no exemptions in this tax.

Neither the public nor the lawmakers would have been ready for this action program of the last two years had it not been for the previous five years of study and public discussion. It was Gov. Strom Thurmond who recommended to the general assembly in 1947 that a statewide survey be made of public school needs. The legislators agreed, and a special committee appointed by Governor Thurmond worked with George Peabody College in making a thorough survey.

The report, made to the legislature at its next session (1948) was not permitted to gather dust on dark shelves but was taken by the committee into every county, where it was presented to and discussed by citizens.

Among the items in that 1947 survey was an estimate that South Carolina needed \$88,000,000 for school buildings alone. (Rising costs since that time have raised this estimate.)

The survey also recommended more authority for county boards, the creation of larger school districts, and the establishment of more efficient transportation.

### EDUCATION FOR EVERY CHILD

This article has described how South Carolina organized "to provide for every child in the state, white or colored, at least a graded school education." It dealt specifically with the manner in which public opinion was prepared, described broader concepts of state responsibility and authority, and told how machinery was set up for operating both on the state level and on the county level. It listed four guiding principles adopted by the state educational finance commission.

Next month's article will show how these guiding principles were put into operation by county boards, especially in the realignment of attendance areas and in the reorganization of transportation plans.



**M**ICHIGAN citizens — nearly a quarter of a million of them—who furnish both the children and the cash for the public schools of that state have had their say about education in Hometown. They have responded to a "bill of complaint" filed by a select group of business leaders, professional men, laborers, editors, farm leaders, housewives and industrialists; they have replied with no uncertainty that the schools are doing a good job for these times. These citizens indicated their willingness to go even beyond the financial support for schools requested by way of taxation today. The response is from a statewide sampling representing all types of communities.

Most important findings of this, the first large-scale poll of citizens administered by school superintendents to find out the public's appraisal of the public school program and practices, can be summarized in three or four brief statements:

1. The public, given an opportunity to evaluate its schools in privacy, is invariably fair in its judgments and generous in its praise.

2. Parents and other citizens who are negatively critical represent a small, though oftentimes vocal, minority.

3. The people of the state are much more liberal in their willingness to finance a good school program, including adequate salaries for teachers, than boards of education and school administrations have believed.

4. When confronted with a list of subjects spanning the curriculum, including some designed to meet changing conditions of life and economy, the men and women of the state have spoken freely and in a realistic manner. They have placed highest value on subjects that will tend to train the individual to earn a living.

5. The public is not getting the kind of news it most wants about its schools from its local newspapers. And the public knows the kind of news it would like to be informed about.

#### **BIRTH OF THE POLL**

A word about the "how come" of this poll and the instrument through which it was placed in the hands of the people may be of interest.

The late Lee M. Thurston, as Michigan superintendent of public instruction and a long-time advocate of citizen participation in educational planning, created the Michigan Commission on Educational Policies in October 1949. At the initial meeting, the

#### **Statewide survey shows**

# **What Citizens Really Think About Schools**

#### **OTIS CROSBY**

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state superintendent "discussed some of the social and economic trends which suggested the desirability of such a commission to advise the department of public instruction with respect to the educational policies it should pursue regarding the improvement of community education. He placed considerable emphasis upon the invigoration and improvement of the local community school as the surest means of maintaining a free American culture."\*

At one of the early meetings there was some discussion regarding criticisms of today's schools—teachers, texts, methods, the fundamentals, and the general tone of education. The minutes of the commission do not indicate that the members feared such criticisms. Rather, a committee was named to survey the problem and prepare a "bill of complaint."

Were the complaints true and, if so, to what extent? The members of the commission who drew up the bill made it clear that they did not believe there was any school in the state to which all of the criticisms applied. And they hastened to add that perhaps there was no school in the state to which some of the criticisms did not

apply. They felt it the duty of every superintendent to study the issues and to set out systematically to determine which apply in his school district and to what extent and then to do something about it.

#### **TRUE BILL OR NO TRUE BILL**

Unlike most negative comments on education and educational methods, the statement suggested that "parents don't yearn for the old 'horse and buggy' day technics. They will go along with you on progress and new methods. . . ."

"In general, parents in Michigan agree that the schools are capable of doing a much better job than the schools they attended 25 years ago. . . ."

"Parents agree that the schools know how to do a better job of training youngsters to read quickly and to add than was done 20 years ago. They agree that [today's schools] have much better teaching technics, but they do not agree that [schools] are all doing a good job with these technics."

The statement pointed out that "it matters less that the complaints may not be all justified than it does that these strong feelings do exist and that nothing is being done at present to counter them."

The statement went on to criticize overdomination by petticoat rule; ob-

\*Minutes of Michigan Commission on Educational Policies, Jan. 3, 4, 1950.

vious misfits in teaching; protection of teachers who aren't able to do a good job; "softness" and the avoidance of all forms of conflict, such as report cards; overextension of "anti-correction" philosophy; the building of character and the ability to think "only at the expense of ability to write well, read well and do arithmetic"; autocratic school government; unwillingness to accept suggestions from lay people; poor vocational guidance, and lack of sufficient emphasis on teaching the basis of religious or ethical thinking.

In the area of practical teaching, commission members expressed the belief that young people today do not know how their own homes are assessed for property taxes, what pays for the schools and city government, and how sales taxes are levied. They criticized "inadequate economics training" and expressed the belief that children today should know a good bit about business economics—depreciation, obsolescence, profits, and government economics or finances, and the limits to taxation.

And so the compendium of hearsay ran regarding today's educational offerings and accomplishments in Michigan. It is likely that such a document could be written about the educational offerings of any state.

Equipped with the far-reaching, well worded, seemingly honest compendium of "what ails the schools and education," the commission was faced with the problem of how to reduce it to simplest terms and how to get it into the hands of those who own the schools and pay for them, through the medium of the superintendents of the state.

#### THE PUBLIC IS QUESTIONED

The state department of public instruction has had for a number of years a committee on school interpretation (public relations). This committee was asked to study the document in question and to attempt to reduce it to a popularized polling device. After committee members had consulted with professional polling agencies in the state, the polling agency of one large automotive company, and various schoolmen, an instrument of four pages, illustrated, was finally published under the caption, "How Would You Answer This?"

The published questionnaire was made available at a nominal cost to superintendents who might care to use it. The state superintendent made it

#### What Michigan Public Is Willing to Pay For

Michigan's citizens were asked what, in addition to education in the three R's, health and science, they would insist on and be willing to pay for even if it should add to the school tax bill. Responses by percentages were:

- 75.1 Instruction in a vocation (job skill) of the pupil's choice
- 60.9 Home and family living (budgets, buying, family relationships, child care, food, clothing)
- 56.4 An understanding of the history and geography of our country and perhaps the world
- 50.9 Public speaking
- 49.1 Appreciation of and possible participation in music and art
- 40.3 Competitive athletics
- 36.5 Learning to drive a car
- 33.4 Opportunity for activity in school clubs
- 26.9 Ability to speak a foreign language

clear at a statewide superintendents' meeting that use of the instrument was entirely optional with any who might be interested. Those electing to use it would pay for the number of copies they wanted and distribute these copies in the manner that fit their situations best. They were invited to file a copy of the findings with the state department of public instruction with the understanding that the results would in no way be identified with them or their communities. To date, 100 superintendents have reported on the use of more than 40,000 copies although a quarter of a million copies have been purchased.

What do the people think of their schools when they have an opportunity to consider their opinions in the privacy of their own homes?

The conclusion that Michigan's citizens are generally well satisfied with their schools is supported by the data. Returns have been so consistent that a definite pattern or formula has been established in relation to responses to each question. More than nine out of every 10 respondents feel that:

1. Today's teachers are well trained and up to date.
2. The teaching of good manners, the ability to get along with others, public speaking, and the like are not "fads and frills."

Three of every four who participated believe that:

1. The quality of education in today's elementary and secondary schools is at least as good as that of previous generations.
2. The schools of Michigan are not trying out too many new ideas and experiments or making too many changes.

2. Salaries offered teachers are low.

In terms of citizenship, the respondents feel that the schools are doing their best work in teaching the im-

portance of voting. On the other hand, they do not believe that schools are doing such a good job of developing a knowledge of (1) how a home is assessed for taxation; (2) how business and industry are established and financed; (3) the place of profits in business, and (4) the purpose and workings of organized labor.

The interest of parents in education concerning business, industry and labor is reflected in the responses to a question on curriculum, which reads:

"All of us want our children to have a good education in the three R's, health and perhaps some science. Beyond this, what would you insist on and be willing to pay for even if it should add to your school tax bill?"

Nine areas were offered for consideration. They included athletics, school club activities, public speaking, learning to drive a car, ability to speak a foreign language, home and family living (budgets, buying, family relationships, and so forth), instruction in a vocation (job skill) of the pupil's choice, and understanding of the history and geography of our country and perhaps the world.

#### JUDGMENT OF THE 40,000

First in importance in the judgment of the 40,000 Michigan citizens was instruction in a vocation of the pupil's choice. Three out of every four checked this as important. Second, with three out of five assenting, was the subject of "home and family living." Third in importance, with slightly more than half marking it for preference, was "an understanding of the history and geography of our country."

In the matter of the development of qualities of character, the respondents indicated that they rate the schools highly particularly on the teaching of "good citizenship." The matter of

### "Earmarks of a Well Educated Person"

Michigan's citizens were asked how they decided whether a person is well educated. Responses by percentages were:

- 71.2 His grammar, pronunciation, etc.
- 66.6 Ability to meet people—poise, manners, ease of conversation
- 64.9 Ability to say what he means
- 52.3 The things he talks about
- 38.4 Appreciation of literature and good music
- 34.7 The way he talks
- 32.0 Personality
- 31.0 Accuracy in figuring a problem
- 26.9 The way he acts
- 21.5 His "at homeness" with new friends
- 15.4 The friends he keeps
- 5.4 The amount of money he makes

"pleasing personality" ranked second and "honesty" third. "Discipline" and "politeness" ranked fourth and fifth.

How do you recognize a well educated person? The respondents placed highest priority on "his grammar and pronunciation"; second, on his ability to meet people, including his poise, manners and ease of conversation. Third was "his ability to say what he means."

The amount of money an individual makes is not an indication of whether he is educated, according to Michigan citizens. In fact, only 5 per cent felt that earnings were significant when such a judgment is made.

Somewhat of a surprise was the public's response to a question about its satisfaction with the school news appearing from week to week in local newspapers. The question, it should be said, was inserted by the committee responsible for drawing up the questionnaire. Opinion on the question of whether the newspapers give the kind of information the individual wants about his schools was about evenly divided.

#### SOME INESCAPABLE CONCLUSIONS

Some conclusions may not seem injudicious. Several are inescapable:

1. Negative criticisms of Michigan's schools come from a small minority. The great majority of the state's citizens regard the educational program as sensible, substantial and sound. At least three of every four citizens responding are firm supporters of their schools and their program.

2. A healthy readiness for school-community cooperation exists, in fact. Citizens recognize the problems of professional educators and are willing to participate actively in attempting to resolve them.

3. Community size and complex have little influence on the opinions

of citizens on school matters. Results of the survey clearly establish that the response pattern for a rural hamlet does not vary appreciably either in nature or degree from that of suburban villages or large industrial cities.

One word about the distribution or the selection of the sampling. Superintendents were urged to poll any or all publics and, as a result, virtually every type of sampling has been reported.

In one city of 25,000, every doorbell was rung by a parent. A questionnaire was left, along with an envelope. The resident was asked to fill out the questionnaire, place it in the envelope, and seal it. A parent called for it within a day or two. The response was about 55 per cent, and the returns were basically no different from those where only the school public or other large sections of the citizenry responded.

One superintendent administered the poll to members of his service clubs—Kiwanis, Rotary, and so forth. He found they responded, in the main, slightly more generously and with more praise than did the general citizenry. Some school systems circulated the questionnaire through every fifth pupil. Others picked out particular grades. But where the sampling was adequate, the responses indicated no significant difference from widespread or select and large group pollings.

The response to the question pertaining to school news has challenged several small town and metropolitan editors. In some instances school pages have been instituted. In others, student reporters have been recruited; some are paid and some are not. In virtually every instance the questionnaire has been the basis for a series of valuable stories on the public's assessment of its schools.

One superintendent reports a revision of certain parts of his curriculum

in response to what the public wants or doesn't want as indicated in the questionnaire. In another area in which automobile accidents involving youths had been a matter of concern the public was still unconvinced of the place of driver training in the school curriculum. Here was a case where better public relations seems to be needed to show the place of driver training in the lives of young people and what is involved in the work.

In one community results of the poll shed light on several important local issues. Responses indicated that the citizens were already prepared to vote favorably on a new elementary building and a higher tax rate.

Still another community confirmed the belief of the board that a program of shop expansion was essential and desirable.

One superintendent wrote, "Our twelfth grade civics class made a study of the questionnaire and formulated a set of principles on which it would conduct a similar type of survey." Another superintendent declared, "The interest in new ideas and experiments supports our plan to apply for admittance to the Michigan Secondary School-College Agreement Program." Still another wrote, "It was a wonderful idea and has given us much food for thought in curriculum planning."

#### SURVEY HAS LIMITATIONS

It seems important that school people recognize that any survey of public opinion has certain limitations.

1. Public opinion does not displace professional judgment though it often corroborates it.

2. The analysis of results should be on a positive basis. Some advocates of the teaching of foreign languages and driver training, for example, have exhibited concern that these were not looked upon as "essential" by more parents. They have, however, overlooked the fact that the percentage of responses favoring the teaching of these courses is much higher than the percentage of all students who are now enrolled in such classes.

3. Only the indiscreet would accept the results of "How Would You Answer This?" and similar sampling devices as a mandate for curriculum changes. Their validity stands secure only as long as the responses are recognized as statements of opinion. As such, their most obvious significance is the positive establishment of a sound basis of cooperative school planning.



Who knows the answer—

## Are Senior Trips Worth While?

**I**N SOME places it may be called a senior sneak or a skip-day, in others a gigantic enterprise, but, whatever the label, about half the schools in America sponsor some kind of senior trip.

In spite of considerable apprehension and even violent opposition by some school administrators to such excursions, the majority of superintendents (including those who do not yet sponsor this activity) favor a trip for students to places of general interest. Most administrators insist that the trip be educational in nature, but a few admit it is pure recreation and so what? A questionnaire sent by *The Nation's Schools* to 500 school superintendents selected at random throughout the nation, shows that out-of-town trips of some kind have become a standard feature in many school programs.

From comments that accompanied the returned questionnaires two questions loom large.

First, can we really tell how much educational value students get from these trips?

Second, how should they be financed?

Several superintendents indicated in their responses that they need some authoritative answers to these two questions right away quick if they are going to answer the pressures now being applied by parents and pupils.

Almost two-thirds of the superintendents favor some kind of trip for seniors. The prevailing opinion seems to be summarized by the superintendent who commented: "Senior trips are fine if they can be controlled and if all seniors are permitted to participate. 'Select group' trips should not be called senior trips, and school trips cannot be defended unless they have real educational value."

Describing their experiences in recent years, many superintendents insist that educational value is the usual result. One comment states that there is as much learning experience in the raising of money and the planning of the itinerary as there is in the trip itself. An administrator from a small community insists that the broadening cultural experience for rural pupils contributes to a worth-while goal of education.

### BIG WARNING

From the administrators who have tried senior trips and found them successful, the big warning is: "Give special attention to planning." Specifically, these comments point out that trips should in some way integrate with other school work, that teachers who act as chaperones must be skilled not only in handling pupils but in gaining real value from sightseeing, and that parents must be in on the planning and must assume some responsibility

in the trip. A number of superintendents point out that the headaches on short trips are minor compared to the migraines caused when the affairs become overnight trips.

A few school systems, apparently accepting senior trips as a legitimate curricular activity, foot the entire bill. A large majority of the trips, however, are financed by the students either wholly or in large part. And this is where the big problem comes in; either parents shell out the necessary money just before the trip—which means that there will always be some students who can't afford the tariff—or else the class spends four long years thinking up clever money-making schemes and irritating local merchants into making contributions. What ho, public relations.

"I consider senior trips to be in the same category as all-night prom parties . . . they are all hokum," says one superintendent, reflecting on bitter experience in recent years. Another respondent to the poll relates how each successive class group used to strive to outdo its predecessors in excesses of all kinds. "We simply called a halt some three years ago," he said. Among the 38 per cent of administrators not favoring senior trips, the major objections are these: It takes money away from more worth-while activities in school; it creates an unnecessary hardship on sponsors; money-making schemes become the central feature of the school year, and most trips become more of a "final fling" than anything else.

Some superintendents are sure that they detect in this senior trip business a Frankenstein monster which is getting larger and more ominous each year. "Trips are growing farther and longer, and classes are spending four years of fund raising for themselves at the expense of activities they might do which would actually benefit the school" is one comment. About 25 per cent of those who don't favor trips have at some time given them a try.

From the results of the poll it seems evident that administrators need a great deal more evidence than they now have on the educational values of senior trips. Assuming such trips are worth while, the schools must work hand in hand with the community to iron out the problems of financing the trips. Any worth-while school activity which is denied students who don't have adequate bank accounts is obviously not defensible.

### SCHOOL OPINION POLL

1. Do you favor "senior trips" to places of general interest, such as Washington, D.C.?

Yes.....62%      No.....38%

2. Does your school system provide this kind of trip now?

Yes.....49%      No.....51%

# COLOR What research knows about in the Classroom

by Arthur H. Rice

IT SEEMED like a practical assignment. "Let's serve our readers," we said, "with this special portfolio on 'Color in the Classroom.' We'll summarize the significant research in this field. We'll show how these findings can be applied to the schoolroom—not only to provide a pleasant environment for the child but also to improve his behavior and his scholastic achievements."

We had just visited with a scientist who participated in the two-year study in the Baltimore public schools. That project offered fascinating evidence that the planned use of color in the elementary grades can improve the academic work of most children.

And so we'll do just that—summarize and apply research on color as it affects learning. But first we'll have to agree on what is actually meant when we use the term "color." As one scribe quipped, "There's more to color than meets the eye."

**Color Is a Triple Play.** Color *isn't* a brushful of something that painters put on the wall. Color is mass, but not matter. When we see color, we

really are watching a triple play, a Tinker-to-Evers-to-Chance. Only the players in this game are: *saturation*, *luminosity* and *brightness*. But first, let's take a look at the ball—that is, the ball of light. The electro-magnetic spectrum is a bunch of wave lengths. Only a very small part of that bunch or bundle is visible to the human eye. The visible portion is neatly arranged in groups of wave lengths that science calls the visible spectrum. Each group produces an effect that we call a color.

At one end of the visible band is red; at the other end, violet. These wave lengths range from 16 millionths of one inch for the violet to twice as much, or 32 millionths of one inch, for the red. Beyond the red is the invisible infrared, and then a wide spread of radio waves within which is a small section constituting the broadcast band for radio and television.

At the other end of the visible spectrum, beyond the violet, are the ultra-violet, the x-rays overlapping the gamma rays (the atomic bomb gives off gamma rays), and—beyond them—the cosmic rays, all a part of the electro-magnetic spectrum.

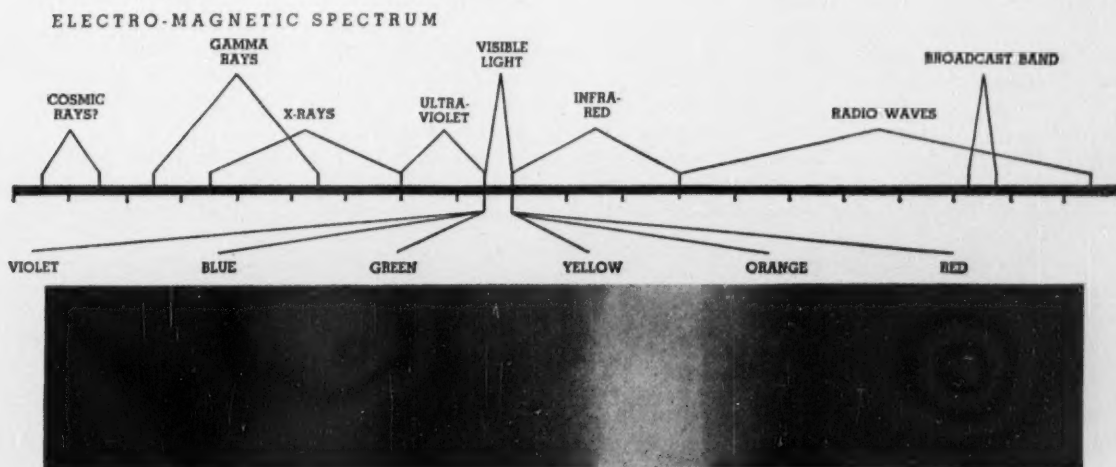
Now let's get back to that triple play. A pure color or hue is produced by the central portion of each of those groupings in the spectrum. Red, for example, starts mixing with yellow on one side of the band and merges into infrared on the other side. The pure red is called a *saturated red*.

Saturation, then, corresponds to the purity of a color. But the way that color really appears to our eyes also is affected by brightness and luminosity.

The *brightness* of a color is determined by the quantity of light energy reaching the reflecting surface, regardless of wave length.

*Luminosity* is the trickiest of the three players, because luminosity can fool us into thinking that a color is brighter than it really is. Luminosity results from the effect of the light ray upon the eye itself. It was explained to me by a psychophysicologist this way:

"Take, for example," he said, "the color yellow-green. It has the greatest luminosity of all colors because when this bundle of wave lengths hits the eye, the rays bend and come to a focus approximately at the retina, thereby



THE VISIBLE SPECTRUM

concentrating the energy from those light rays upon the smallest possible point or area on the retina. We don't know just what happens, but we do know that the smaller this area of concentration, the brighter the color appears to be.

"Blue, on the other hand, being a shorter wave length, will come to focus a perceptible distance in front of the retina, and thus project a larger area onto the retina itself. In fact, this area from a blue wave is five and one-fourth times larger than that of the yellow-green.

"The mistake is sometimes made of assuming that a color, because it has considerable luminosity, is contributing brightness to the room. Such may not be the case."

We'll understand more about the behavior of light before we finish this "course," but let's talk now about some characteristics of color that all of us know about—or think we know. It's commonly supposed that each color has a tonal or emotional effect upon an individual, and research agrees on that fact. But research does not agree as to *why* this is true.

The more commonly accepted explanation—that of the psychologist—is the *association of ideas*. Red suggests heat to us because of heat from a fire. Yellow suggests warmth from the sunlight. Blue connotes coolness because of blue waters.

**Color Is a Magician.** The psychophysicist attributes these emotional reactions to the apparent *displacement of color*. So perhaps we ought to talk about that phenomenon next.

All research recognizes that these "triple plays" by saturation, brightness and luminosity can make objects appear to be farther away or closer than they really are, or cause objects to appear larger or smaller, or heavier or lighter, than they really are. Obviously, this has considerable significance for the manner in which every classroom is decorated.

In the early part of this century, Walter B. Cannon started a school of thought concerning the balancing mechanisms of the body which could be interpreted to imply that there is a higher heat output when objects appear closer. The human mechanism, he said, becomes more alert as people or objects come closer to it. We become more aware of the presence of these things, and consequently our responses are quicker.

Now, say his followers, since the color red makes things appear closer to us, it causes us to be more alert and therefore we put out more heat energy. A dominance of red, then, in a room makes a person feel as if things were closing in on him. It gives him a warm feeling, and we call it a *warm color*.

At the other extreme, the color blue makes things appear to be farther away. Therefore it does not set up as quick a response in the human mechanism. So we consider blue as a *relaxing color*. Or, if we may be a little more technical, the appearance of closeness comes from the space-dispersion effect of color, which in turn is the result of the lack of color correction in the eye. Therefore the awareness of color takes place at different focal points within the eye. Consequently, temperature differences in the body are induced by responses to color.

#### **The Color of Feeling and Seeing.**

The *emotional* effect of light and of color upon the child is only one of several considerations when we plan the decoration of that room. We are concerned not only with how the child feels about the color but also—and perhaps even more important—with how well he can see and what kind of seeing is involved. Will he be reading, or tossing a basketball, or just resting? For each of these three situations the source of light and the decoration should be uniquely different.

The old saying that you can't get blood from a turnip has an application here. You can't get a color effect from any surface unless the wave length to produce that effect is inherent in the source or sources of light.

If an artificial source of light is noticeably lacking in one or more elements of the spectrum, it will correspondingly produce an inadequate or exaggerated color effect. For example, a source of light that is dominantly blue reflecting on the surface of a similar blue would have the effect of washing out or eliminating the blue and creating the appearance of a white surface.

Research also tells us that we never get back from any surface all of the light energy that strikes that surface. Even standard white will reflect only 92 per cent of daylight. What happens, as must be apparent, is that the light energy is absorbed by the density of the surface it strikes. So, says the scientist, decoration *modifies* light

energy in a room, and it does so as a physical manifestation.

The light that reaches the eye appears to be a certain color because the surface from which that light is reflected has absorbed all of the wave lengths in that light beam except one band or group of wave lengths. Presumably, the other wave lengths are dissipated as heat energy when they penetrate the pigment in the paint. However, most pigments reflect more than one color, but they dominantly reflect just the one band or group of wave lengths that constitutes a color.

**Yes, You're Sober!** The reader from his own experience can verify that he has found it difficult to see objects clearly and in their right perspective in a room that overwhelms him with one color, especially if it is a pure color.

The "why" of all this is a bit difficult to explain, and this may be an oversimplification, but the psychophysicist states that it is somewhat as follows:

The different wave lengths (or colors) that strike the eye produce different effects as they are projected upon the retina. These differences in focal point make different colors appear to be at different distances, although by actual linear measurement they will be the same. Thus, red to a normal eye appears closer than any of the other colors, and violet appears to be more distant.

It's this variety in focal points that enables the eye to focus on a task or an object in the room. Consequently, any room that is intended for critical seeing, such as reading or writing, should not be decorated in one color, especially if it is a pure color. A warm gray would facilitate good seeing because there probably would be red and blue or even the whole spectrum reflected, even if the dominance is gray.

**Dancing in the Dark.** Most of us remember from the psychology we studied in college that "after images" sometimes interfere with one's vision. Perhaps the best known research in this field has been done by Harry Helson, professor of psychology at the University of Texas. Dr. Helson showed that the color of the background would project an after-image onto a figure on which the eye was focused. This after-image would be positive (the same color) or negative (the opposite color), depending upon the color of





This primary room in the Hampden Elementary School in Baltimore, as redecorated for a study of the effect of color, has an all-blue motif. One wall (not shown) is painted a grayed blue. The other walls are a 4 to 1 letdown (4 parts white to 1 part blue). The ceiling is white. The prevailing practice in planned decoration for classrooms is to use warm colors in rooms having cool exposures, and cool colors for warm exposures.

the background and the brightness or reflectance of the background.

Low-reflecting, cool colors would project a negative after-image on a brighter figure. With a bright background, the after-image projected on the figure would be positive.

Previously, we described the space-displacement effect of color and the size-variation effect of color. If extraneous colors now appear as after-images, they will produce distortions affecting the accuracy of seeing. An example of this is the background image that can result from the improper choice of colors to be used on a chalkboard.

### IN THE CLASSROOM

**T**HE physical facts about the behavior of light and the nature of color are constant, but the behavior of a human being is not so predictable.

Most of the research in color has been conducted in the laboratory where an experiment can be set up with very few variables and the entire project can be closely controlled. It's still

mostly guesswork as to how these laboratory findings will operate in a situation where there are many unknown factors.

To date, there have been two extensive experiments in actual classroom situations, one at West Lafayette, Ind., and the other at Baltimore. Both of the studies indicate that children in the elementary grades benefit considerably when the classroom environment is improved.

At West Lafayette, the experiment was conducted under the supervision of Newell C. Kephart of the department of occupational psychology, Purdue University, in accordance with what research has evolved to date concerning color and light in the classroom. Various physical changes were made in the experimental rooms in decoration, lighting and equipment.

Improvements were found when each of the factors was studied independently. According to the Kephart report, the children in the experimental group, as compared with the control group, showed better physical

growth, less visual disability, and fewer personality handicaps.

**Proof of the Pudding—in Baltimore.** The two-year study in Baltimore's public schools produced substantial evidence that color environment, if correctly planned, has a favorable effect on the behavior and performance traits of children in the elementary grades. Observations conducted in three elementary schools showed that color has the greatest beneficial results on children in kindergartens, that boys show greater response to color than girls, and that improvement in *scholastic* achievement is even more noticeable than improvement in *behavior* traits.

The project was conducted by the psychological laboratory of The Johns Hopkins University Institute for Co-operative Research. The Baltimore school system provided the facilities and the subjects for the experiment but did not plan or supervise the experiment itself. The project was financed by a paint manufacturer.

**TABLE 1—KINDERGARTEN CHILDREN**

Satisfactory Behavior and Performance Traits (Mean Proportions)

SCHOOL	1949-50	1950-51	DIFF.	IMPROVED
Hampden (mfr.'s plan)...	.504 (82)	.675 (67)	.171	33.9%
Glenmount (conventional)..	.832 (65)	.893 (69)	.061	7.3
Gardenville (unpainted)...	.806 (96)	.830 (87)	.024	3.0

**TABLE 2—GRADES 1 AND 2**

Four Performance Traits (Average Ratings)

SCHOOL	1949-50	1950-51	DIFF.	IMPROVED
Hampden (mfr.'s plan)...	2.881 (248)	2.913 (229)	.032	1.1%
Glenmount (conventional)..	2.882 (183)	2.992 (201)	.110	4.0
Gardenville (unpainted)...	3.165 (330)	3.175 (276)	.010	0.3

**TABLE 3—GRADES 3 THROUGH 6**

Seven Performance Traits (Average Ratings)

SCHOOL	1949-50	1950-51	DIFF.	IMPROVED
Hampden (mfr.'s plan)....	2.888 (466)	3.145 (471)	.257	8.9%
Glenmount (conventional)..	2.850 (231)	2.864 (290)	.014	0.5
Gardenville (unpainted)...	3.088 (463)	3.004 (496)	.084	-2.7

(The average number of children per quarter is given in parentheses in all three tables.)

A similar experiment was conducted in three of the junior high schools but, in the opinion of the scientists at Johns Hopkins who conducted the research, the data had too many variables to be scientifically valid. It did produce, however, some interesting information concerning student attitudes, and these will be reported later in this article.

#### Keep Secret Nearly Two Years.

The Baltimore project had a practical and realistic approach. It studied schools and school children in typical situations and set up a plan whereby the effect of various colors in the classroom could be observed secretly.

In any research of this kind, it is necessary that the groups being compared be as nearly alike as possible. The Baltimore public school authorities helped the scientists in selecting three elementary schools that have had a record of relatively stable operations over a long period of time. These three schools were quite similar in

size and age, in teacher-pupil ratio, and in the socio-economic background of the children.

The other requisite was that these three school buildings should be equally in need of painting, and so the three selected were schools that were high on the painting priority list.

The study began in 1949. Principals and vice principals of these schools were in on the deal, of course. However, great care was taken to prevent

teachers or pupils from knowing about the experiment for fear it might condition or influence their efforts.

During the first year, complete reports were kept of the scholastic and attitude records of all the children in these three "unpainted" schools. All the report cards were microfilmed, and the information thereon was tabulated.

**The Painting Begins.** During the regular summer painting program following the first school year of the experiment, classrooms and corridors in two of the three schools were decorated. The first building (Gardenville) was not painted because it was to serve as the control school; that is, the records for this school were to be used as a basis of comparison with the other two where changes were to be introduced.

The second building, known as Glenmount School, was decorated in a conventional manner with all four walls in a uniform color, light green, and white ceilings.

The third building, Hampden School, was decorated according to specifications provided by the paint manufacturer. The nature of these colors is shown in some of the illustrations accompanying this article.

During the second year, all report cards were again tabulated for scholastic and attitude records, and comparisons were made with the records of the children enrolled in these "essentially unpainted" schools the previous year.

During the course of the two years, approximately 20,000 such cards representing the records of 2500 elementary pupils were tabulated and studied by the psychologists.

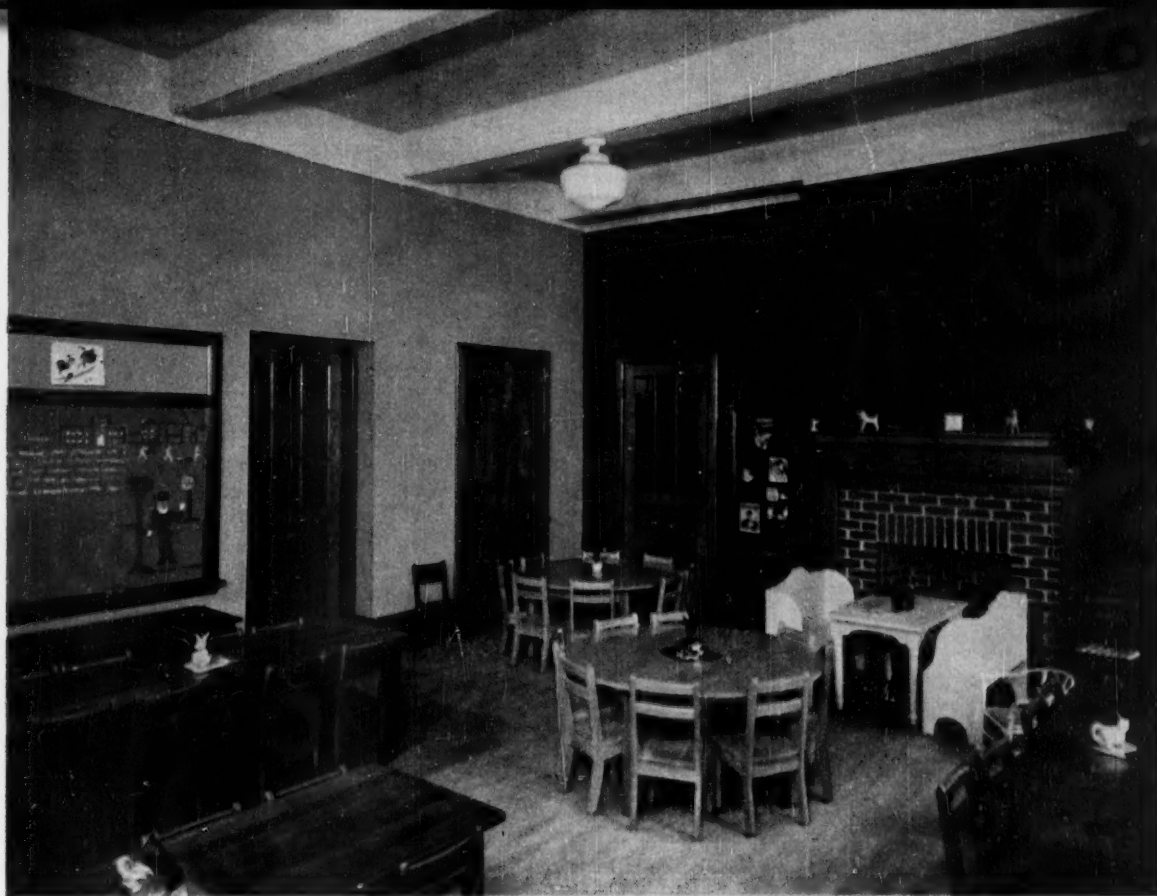
Before we study the tables comparing these records, perhaps we should note the nature of these report forms.

The form used for the kindergarten was different from that used for Grades

**TABLE 4—GRADES 3 THROUGH 6 AT HAMPDEN SCHOOL**

Seven Performance Traits (Average Ratings)

TRAIT	1949-50	1950-51	DIFF.	IMPROVED
SOCIAL HABITS.....	3.130	3.311	.181	5.8%
HEALTH-SAFETY HABITS.....	3.279	3.526	.247	7.5
WORK HABITS.....	2.832	3.038	.206	7.3
LANGUAGE ARTS.....	2.645	2.922	.277	10.5
ARITHMETIC.....	2.554	2.771	.217	8.5
SOCIAL STUDIES.....	2.862	3.223	.361	12.6
ART-MUSIC.....	2.976	3.274	.298	10.0



AFTER

1 and 2, and a third type was used for Grades 3 through 6.

Basically, these records of achievement for all the grades represent the teacher's judgment as to the child's motor, intellectual and social progress. For Grades 3 through 6, the reports also are based upon tests and other objective evidence of scholastic performance.

**And Now—the Evidence.** As other research also has shown, color seems to have its greatest effect upon children of kindergarten age. Table 1 shows that children in Hampden School, where a gay and varied plan of colors was used, responded with much better behavior and performance—as measured by a check list of language skills and work habits.

For Grades 1 and 2, the conventional uniform colors in the Baltimore schools made a better showing than the manufacturer's plan of colors, although in both cases the fresh painting brought some improvement. Table 2 compares average ratings on four performance traits, identified on the report cards as social habits, work habits, language arts, and arithmetic.

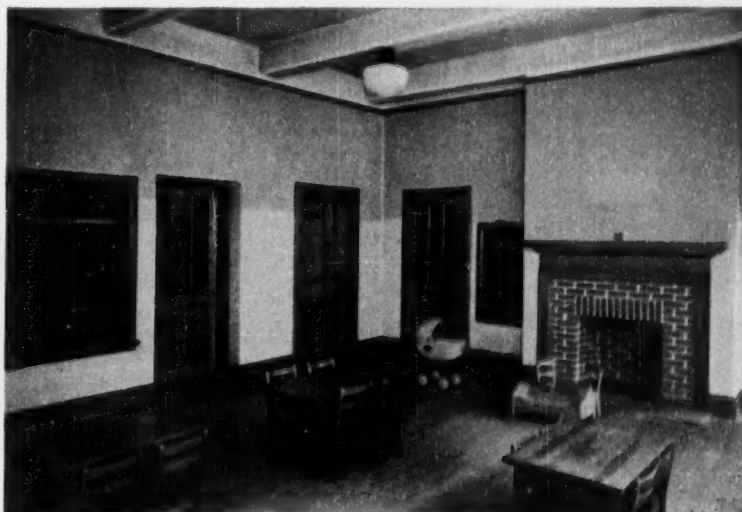
Table 3 compares results in Grades 3 through 6. For these four grades, Hampden School—where the manu-

facturer's plan of colors was used—steps out in front rather briskly. The children were marked on seven performance traits (Table 4): social, health-safety, and work habits; and scholastic achievements in language arts, arithmetic, social studies, and art-music.

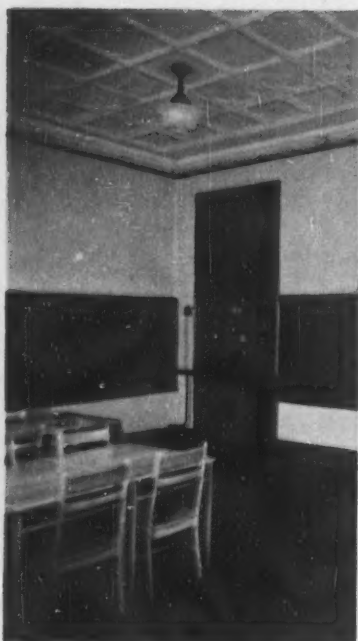
One of the major conclusions from the entire study is that color affects scholastic achievement more than it does behavior traits, as is clearly indi-

This kindergarten classroom in the Hampden School was color treated as a "playroom away from home"—a transitional link between home and school life. The preschool child has already become accustomed to color. Bright colors bring a cheerful response from him. For this reason the bright, gay colors that are preferred by young children are predominant.

BEFORE



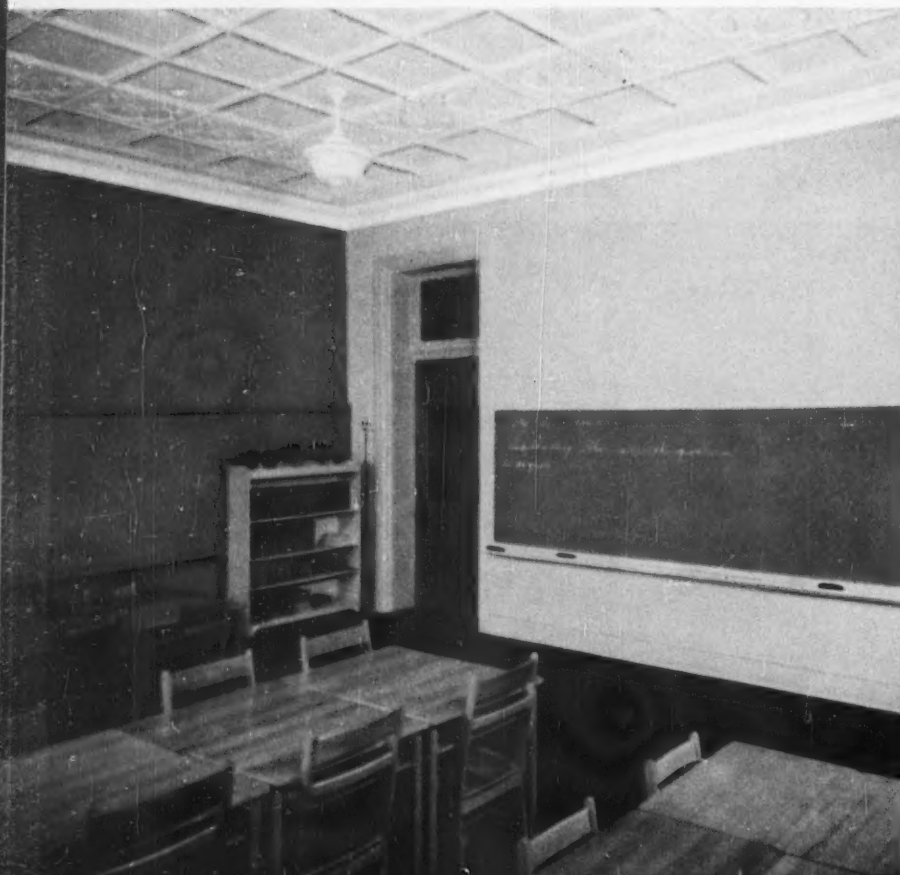




**BEFORE**

Here is the transformation of an intermediate grade in the Hampden Elementary School. The dark chalkboards have been painted a restful green. In fact, the chalkboard blends with the deep green of wall at the left, while it makes a soft contrast with the light warm rose of the other walls. Ceiling is white. Note the improvement accomplished by changing the ugly brown door and transom into the rose tan of the wall and a quiet gray. The trim of a room becomes much less distracting if painted the color of its own wall.

**AFTER**



cated by the results at Hampden School (Table 4). Note that social studies showed more than twice the improvement credited to social habits.

The tabulation of the records of these 2500 children over a two-year period also contained detailed information about absence and tardiness. During the second year, absences increased by 7.6 per cent in the Glenmount School, which was the conventionally painted building, and 3.7 per cent in the Gardenville (unpainted) School. Absences decreased at the Hampden School by 12.7 per cent.

Since the Glenmount School had the largest increase in absences even though it had been newly painted, the Baltimore report concludes that there were factors other than painting that influenced these differences.

Data on the frequency of tardiness were variable and led to no significant conclusions in the study.

**WHAT** did the teachers think about the painted classrooms? Many expressed their opinions at the conclusion of the experiment in a questionnaire, a voluntary proposition with no signatures required.

The responses showed that teachers were overwhelmingly enthusiastic about the newly painted schools but not much difference was noted between the opinions of teachers in the conventionally painted school and those in the building that followed the manufacturer's varied plan of color.

There was a howl (dignified, of course) from the staff of the school that did not get painted.

The great majority of teachers in all the schools expressed the belief that the interior appearance of the school has a marked effect upon the morale of both teachers and children.

Similar evidence that the morale of both students and teachers is affected by color was produced by the study of three junior high schools. The research in these three schools was conducted in exactly the same manner as in the elementary schools.

**The Verdict of Teen-Agers.** At the close of the two-year period, the researchers wanted a direct response from the junior high school students as to how they liked or did not like the classroom environment. Rather than attempt to tabulate the replies from the more than 5000 students in these three schools, comparable groups of about 200 students from each building were selected to answer the questionnaires.

The responses, shown in Table 5 on page VIII, offer unmistakable evidence that colorful decorations add much to the morale of pupils. The questionnaire brought testimonies such as these:

*Clifton Park School:* "My grades are better. The brightness of the rooms adds happiness and makes me do my work better." (8A girl)

"Last year the school looked like a jail. That's how it felt. Now it looks like a home and feels somewhat like one." (9B girl)

*Hamilton:* "I think it has improved in that the building looks cleaner with a new paint job." (9B girl)

And what did the teachers think about the decorations in the Clifton Park and Hamilton junior high schools? According to the Johns Hopkins report, not much difference was noted between the opinions of the teachers



#### BEFORE

This former classroom in the Hampden Elementary School at Baltimore has been converted for use as a teachers' lunchroom. Note how the trim and the chalkboard are blended into the wall colors in the manufacturer's decoration plan as pictured below.

in these two schools, but the teaching staff in the unpainted school emphasized that the classrooms needed re-decoration. Similarly, the great majority of teachers believe that the interior appearance of a school does have an effect upon morale, for reasons similar to those advanced by the children.

But if color has such a delightful effect upon children in the junior high schools, why didn't it improve their scholastic achievements?

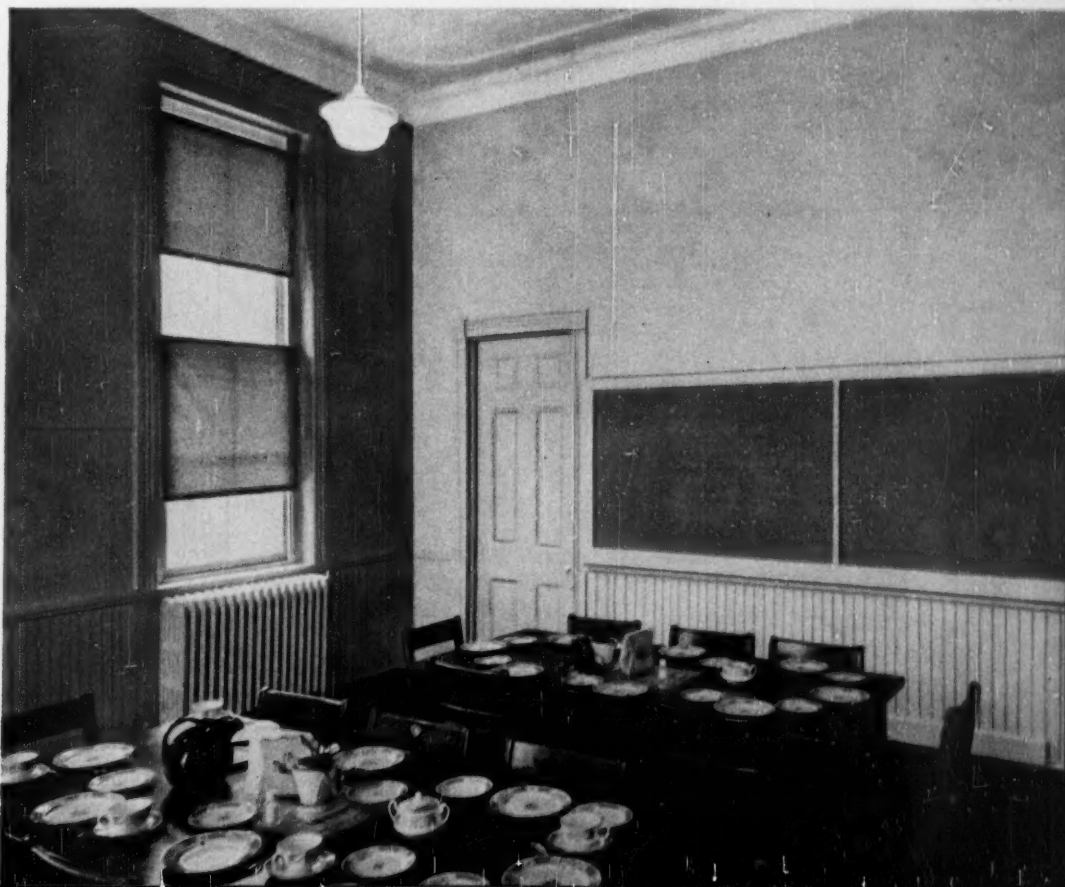
This is a fair question and one that the researchers faced squarely. H. J. Bond, one of the scientists who conducted the research, stated in a detailed

report of the project in Baltimore:

"Perhaps younger children are more readily influenced by color environments than older children, possibly owing to the less complicated and [less] developed nature of their perceptual, emotional and intellectual abilities and to the more protected and

#### AFTER

Color variety is the theme in the decoration of this classroom used as a teachers' lunchroom. Color treatment is different than for any other school area. Window walls are a warm rose tan, other walls a light greenish blue, the ceiling a yellowish green.



simpler character of their social environments.

"Yet if this explanation were to suffice by itself, we would expect that the various age groups within the two kinds of schools would also show the operation of this tendency. Such a trend is not apparent; instead there is an abrupt reversal at the boundary line between elementary and junior high schools."

This question bothered us, too, so we asked other researchers and also did some checking on our own account. We discovered that this seemingly contradictory evidence from the junior high schools was in reality a confirmation of what other research has encountered.

We learned that, repeatedly, experiments in Wisconsin, Texas and other areas in the study of color and other environmental factors in the junior high age range showed contradictory trends. Said the conductor of some of these other experiments:

"During the junior high school age, there is a physical growth spurt that tends to prevent the correlating of achievement in performance records with the single physical factor of the environment."

Now comes the SO WHAT!

Who is going to select the colors?

Does the custodian get the nod and pick colors that show the least dust?

Or does the purchasing agent win with his argument that to standardize on a few colors is more economical?

Does the teacher choose the color that matches her personality and wardrobe?

Or shall we go all out for democracy in the classroom and let the children decide?

And where does the architect come into the picture if this is a new building or a renovation?

And what is the final responsibility of the administrator?

Research can help us a little in its attempt to discover *who* likes *what*—in colors. In 26 different studies involving a total of 21,060 participants, blue emerges as the favorite color. It is followed in sequence by red, green, violet, orange and yellow.

But if we leave the choice to the teacher and the children in her class, there is likely to be conflict. As people grow older, their tastes and preferences in color change. Younger children like the real bright colors. Older people prefer subdued and cooler colors. This was the case at Hampden Elementary School where a number of teachers objected to the bright colors which were used in the kindergarten areas.

It may help you win a quiz program to know that the underprivileged and uneducated prefer colors as they are in the rainbow. As one acquires more culture or the ability to buy more, he develops a preference for diluted and neutralized colors.

## TAILOR-MADE

WE HAVEN'T kept our promise—completely. We've described research, but we haven't given you a foolproof formula for selecting those classroom colors because—well—because planning the decoration of every room is a *tailor-made* job. The project must be fitted to the age of the group, the kind of activity for which the room is planned, the compass orientation of the room (the direction it faces), the source and quantity of light that enters the room, and the manner in which light is reflected from all surfaces within the room.

This much research tells us: Color in the environment of a child affects his moods, his scholastic achievements, and his physical well-being. The selection of those colors is the concern, in some degree, of all who determine the activities and the environment of that child.

You take it from there.

TABLE 5

## Survey of Student Attitudes in Three Junior High Schools

QUESTION	RESPONSE	CLIFTON (MPR'S. PLAN)	HAMILTON (CONVENTIONAL)	GARRISON (UNPAINTED)
1. On the whole, how do you like this school?.....	"Like".....	83.4% (214)	76.7% (215)	74.9% (207)
*2. Is this school year better than last year?.....	"Better".....	77.4 (124)	61.2 (121)	58.1 (129)
3. Do you think that the appearance of a school building, inside and out, is important in the way you feel about the school?.....	"Yes".....	85.4 (212)	87.1 (210)	83.6 (207)
4. What do you think of the appearance of this school?.....	"Good" and "Excellent".....	91.6 (214)	90.7 (215)	81.7 (208)
*5. Is the appearance of the school better or worse than last year?.....	"Better".....	92.8 (125)	71.5 (123)	52.3 (128)
*6. Has the new paint made a difference in the way you feel about the school?.....	"Big Difference".....	57.7 (123)	31.7 (123)	Question not asked
*7. Do you like the color scheme?.....	"Like".....	80.4 (124)	61.3 (119)	Question not asked

\*Asked only of those students enrolled in the school during the prepainted year. (Size of sample in parentheses.)

The Baltimore experiment was conducted by The Johns Hopkins University Institute for Cooperative Research under Wendell R. Garner, director of the psychological laboratory, and his staff associates, Hudson J. Bond and Randolph Hanes, and was financed by the Pittsburgh Plate Glass Company.



## SCHOOLHOUSE PLANNING



***They planned what they wanted  
and then built the high school***

### **DUANE R. TAFT**

Superintendent of Schools, Sunburst, Mont.

### **ALFRED FRANCIS BORDELEAU**

Bordeleau-Pannell, Architects and Engineers, Great Falls, Mont.

**T**HOSE interested in the new high school at Sunburst, Mont., first planned what they wanted and then built the schoolhouse accordingly. Three years were spent in the planning and building.

Sunburst is located in the northern part of Toole County, which lies in north central Montana near the border of the province of Alberta, Canada. The population of the area served by the school is approximately 2500, with a high school population of about 200. The northern part of this district comprises some 800 square miles of rolling land dotted with oil wells. A refinery is operated in Sunburst. The majority of the rural people are engaged in ranching, small grain farming, and the commercial production of mustard on a large scale.

After many conferences of lay groups, faculty members, consultants and school board members, it was generally agreed that the Sunburst school should be concerned with three main areas: college preparatory courses, vocational exploration, and terminal or life preparation education. A large

percentage of graduates attend college, but a larger percentage go into local industry or seek training in trades or vocational preparation through the armed forces training programs. The majority of students, as in most communities, will probably have their final educational experiences in high school.

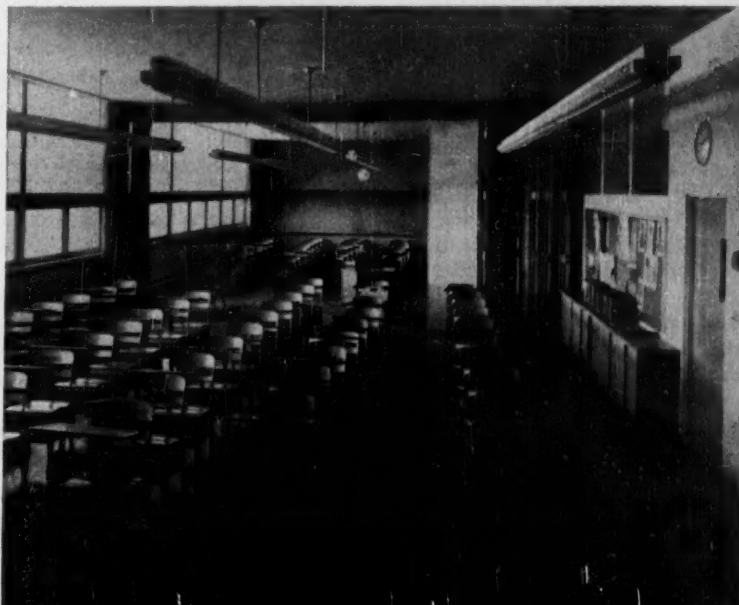
With this in mind the conferees agreed on a curriculum aimed at meeting these needs. This curriculum became the basis for planning the building. The actual planning was done through another series of conferences, mainly between faculty members and architects. Consultations were held with building and curriculum consultants at the University of Washington and with Mary M. Condon, state superintendent; Lilian Peterson, rural school

supervisor, and C. R. Anderson, administrative assistant in the state department.

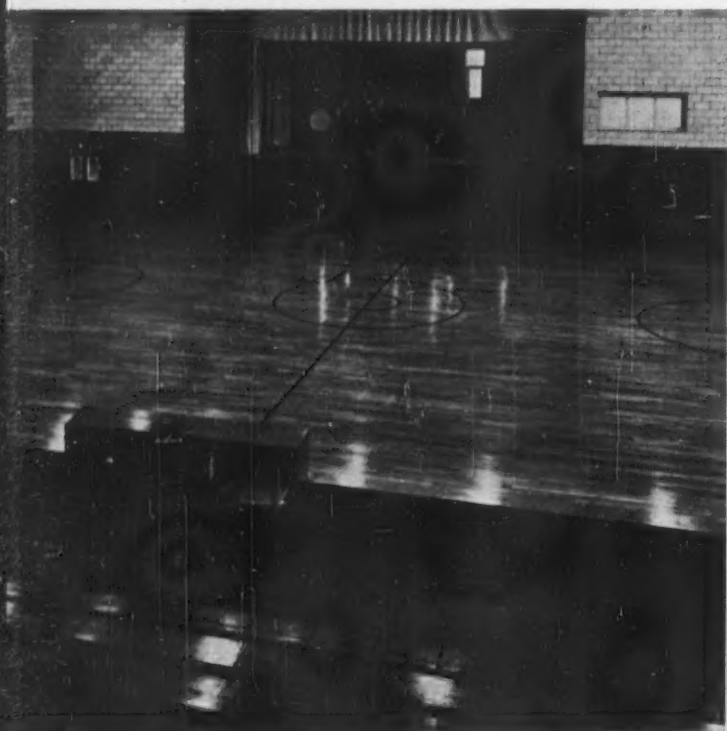
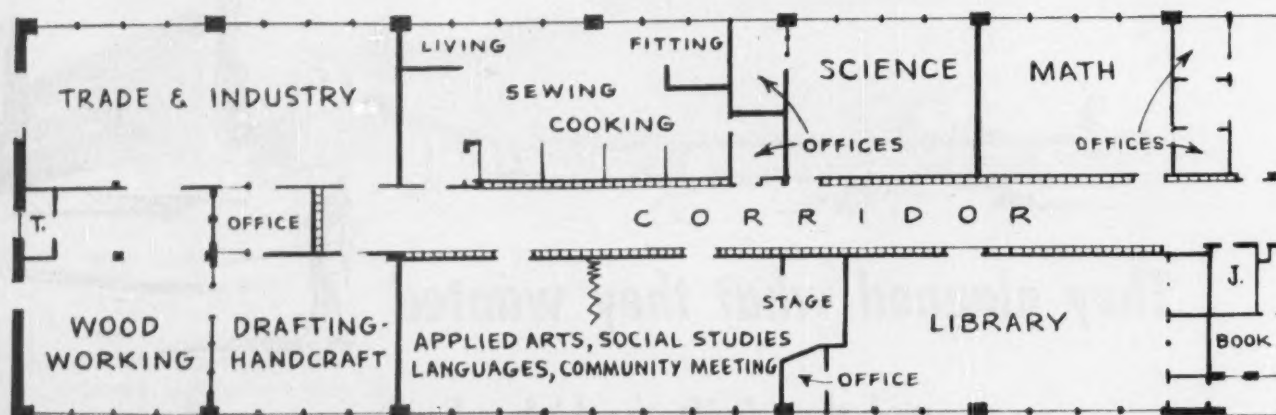
During early conferences it became apparent that several special problems were involved in the planning of the high school. In Montana counties are large, distances are great, and each small city becomes the social center for its area. It was believed that our town and county population was exceptionally interested in cultural programs. Therefore our plant had to be designed to care for numerous community-school wants in addition to the more traditional fixed curriculum schedules.

One important need in this rather stark and bleak area of the country was for aesthetic satisfaction. This

The applied arts and social studies classrooms are divided by a folding door. Frequently, as here, the two rooms are combined for classwork or for meetings of small civic groups.



Below and on the opposite page is the first floor plan of the Sunburst High School. The auditorium and gymnasium were placed at one end of the floor and the shops at the other so that the noisy areas were separated from the classroom areas.



The gymnasium can be divided by a folding drop curtain operated mechanically. Thus boys' and girls' classes can be held simultaneously. The stage was placed between the gymnasium and the auditorium and can be used from either side.

A public telephone, a public address system, and positive action bell and clock setup are part of the equipment. Ample storage space is provided in the school.

The library is located at the center of the building. Part of the library suite is a repair room and a study room. An outside entrance is provided for adults who wish to use the library facilities after school hours. Since the library is controlled by the applied arts and social studies staff, a connection with classrooms for those subjects is provided through an adjoining staff office. Other classrooms were grouped around the library so that students can easily go there when they wish to consult reference or other books.

The classroom wing was planned on a system of equal bays, resulting in a basic room size of 744 square feet. This size was modified according to the use to which each room was to be put and by the introduction of teachers' offices in the classrooms. (Each instructor has a private or semiprivate office.)

After contracts were awarded, the trustees decided to add two bays for drafting, handicraft, woodworking and trades and industry shops. These shops are at the end of the classroom wing because of the noise factor and also to permit easy access with cars and machinery.

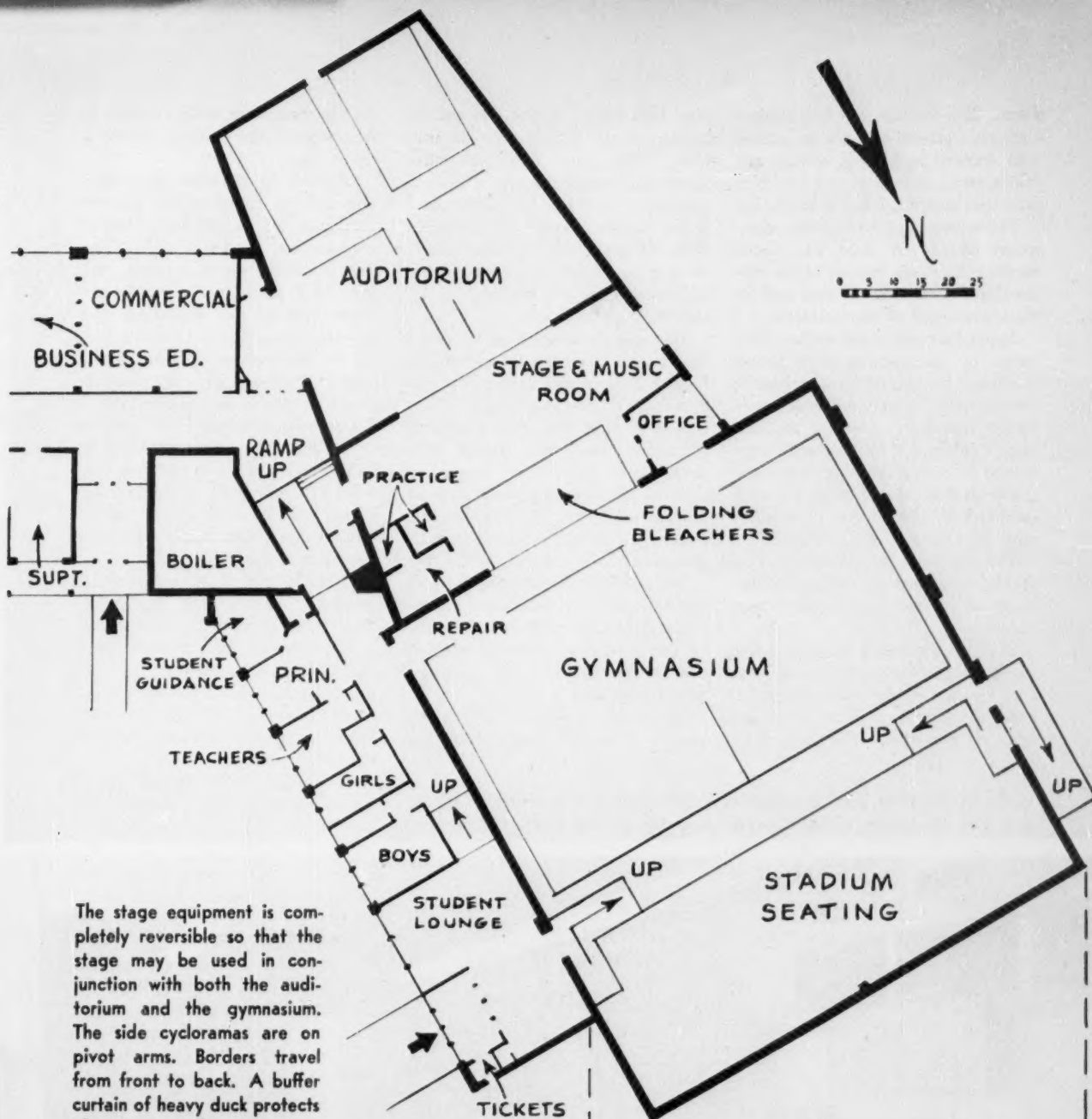
Since the homemaking department is primarily an activity, rather than a study area, it was placed next to the

was met and satisfied through the design, color and atmosphere of the new school.

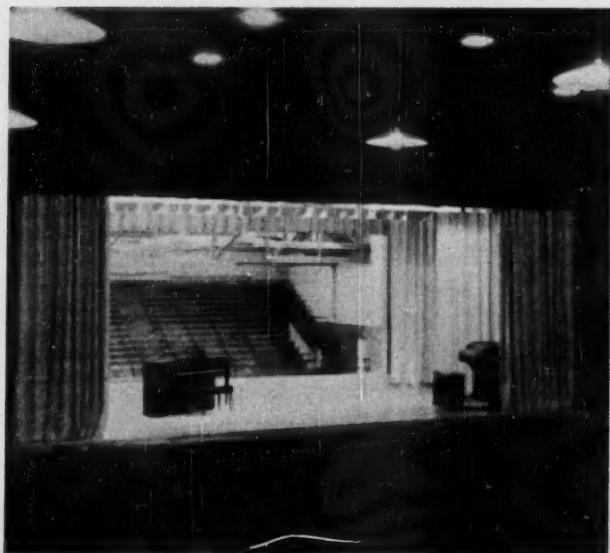
A 15 acre campus—a hillside location—dictated a plan laid out to conform to contours. Ramps were used because of the differences in levels.

Special emphasis was placed on a plan arrangement that would bring about separation of active and quiet areas. The administrative suite is located between the classroom wing

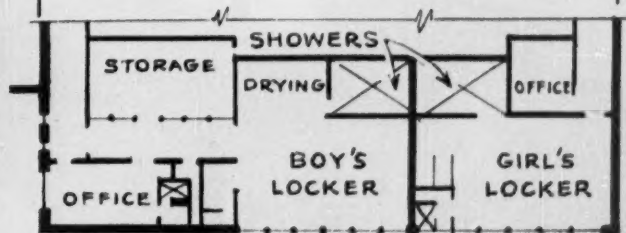
and the noisier areas for athletics, music and public gatherings. This suite consists of a reception room, the principal's office, a lounge for women teachers, and a student guidance conference room. The superintendent's office is adjacent to the student entrance. A student lounge, located away from classrooms, is used by rural students during the noon hour and before and after school and also by spectators at athletic events.



The stage equipment is completely reversible so that the stage may be used in conjunction with both the auditorium and the gymnasium. The side cycloramas are on pivot arms. Borders travel from front to back. A buffer curtain of heavy duck protects the stage in the gymnasium.



#### PLAN UNDER STADIUM SEATING



The storage, shower, drying and locker rooms and offices are all located under the stadium seating.



shops. It is divided into four student kitchens, a general and storage kitchen with laundry equipment, sewing and fitting areas, and an alcove in which decorative combinations can be studied.

The science and mathematics classrooms adjoin. A door was placed between the rooms because of the relationship between the courses and for the convenience of the instructors.

Applied arts and social studies rooms merge by the opening of a sliding door, and a larger room can thus be created when the curriculum demands. Small community meetings are held in this enlarged space. A small stage is used by public speaking classes and group leaders. On the stage is a work counter with sink so that art students may clean up after their classes.

The business education suite is divided by a glass and chalkboard partition to permit one-teacher supervision.

Sunburst has one of the outstanding bands in the Northwest. As an economy measure we decided to house the band and chorus practice rooms and office on the stage. The stage is lo-

cated between the gymnasium and the auditorium so that it may be used from either side. Stage equipment specified is unique in that it may be completely reversed. A heavy duck buffer curtain closes the stage off from the gymnasium. Folding bleachers may be placed on the stage when additional seating is required for district tournament games.

The large gymnasium can be divided by an electrically operated, vertically folding duck curtain so that boys' and girls' physical education classes can be held at the same time. There is ample gymnasium equipment storage space under the stage. Locker rooms and showers for both boys and girls are located under the concrete stadium seating and are easily reached from the gymnasium by means of short ramps.

The auditorium seats 400, the average audience here. Additional recessed lighting fixtures placed at the front of the auditorium make possible the use of this room as an emergency teaching station.

No health center or cafeteria was needed in the new school since quar-

ters for them were made available by conversion of the existing homemaking cottage.

Selection of materials and determination of construction practices were governed by the availability of materials and local conditions. Classroom windows are full length with directional glass block panels used above eyeline and insulating glass viewing panels below. Exterior walls are of Montana brick with pumice blocks, building tile, or structural glazed facing tile used on the interior. Where pumice blocks were used, as in the gymnasium, they were left unfinished in combination with face brick wainscot. One wall of the administration suite corridor and of the student lounge is face brick; other walls are painted plaster.

Floors in general are concrete slab, on grade, covered with asphalt tile. Cork flooring is used in the library. The gymnasium floor is thick maple secured directly to wood sleepers over waterproofed slab. There are ceramic, mosaic floors in the shower rooms, the drying rooms, the locker areas, and the toilet rooms.

The boiler room, centrally located for economy of pipe runs, has walls

In the homemaking room are four student kitchens, a demonstration kitchen, and a small area in which students study fabrics and interior decorating.





of solid masonry. Partitions are wood studs, gypsum lath, and plaster. Ceilings are spanned with lightweight steel joists and are lathed with mesh to which acoustic plaster was applied.

In Montana skies are bright and sunshine is intense. While pastel walls and ceilings are highly recommended for light reflection, the architects thought that classroom walls of deeper colors would provide a psychological benefit, and intense colors were used in other rooms to avoid an institutional look. Entrances and small vestibules are painted stirring colors, such as lobster, blue-green, and vivid yellow. These vibrant colors were grayed as necessary. Library walls were painted almond green, with the exception of the corridor wall, which was painted sunshine yellow.

Since the classroom wing corridor is lighted with a continuous band of clerestory lighting above lockers, it was desirable to paint the corridor walls golden yellow to simulate sunshine filtering through obscure banded glazing. Corridor walls were painted Caribbean blue, and ceilings were left unpainted. The floors are beige. Stolen light panels are divided by deeply

Back of the control desk, at the rear of the library, is the door leading to the office. Adjacent to the control desk is a special reference section.

recessed fins. Acoustic plaster ceilings contribute to the exceptional quiet of the corridors.

Decorator colors were used in the homemaking department to give that area a residential character.

The stage curtain is a heavy weave, free-form patterned fabric with beige background and yellow and midnight blue design. The auditorium ceiling is painted midnight blue, thus creating an interesting light pattern when inverted saucer-like reflector fixtures are illuminated. Walls are yellow to match the drapery. The auditorium is windowless, as it was felt windows were unnecessary in a mechanically ventilated room. We were thus able to sidestep a light control problem.

Fluorescent lights are used in the classrooms. Direct and indirect incandescent light fixtures of contemporary design were placed in other special locations.

A split heating system of combination controlled warm air and radiation was installed. The ventilating system provides constant, automatically con-

trolled fresh air. Dampers are so arranged in duct work as automatically to blend fresh air and room air in varying amounts depending on outdoor temperatures. This is important in a climate where winter temperatures can drop from 40° or 50° above zero to subzero in a matter of minutes. Positive exhaust is provided throughout the building by exhaust fan units located on the roof. The capacity of these units is sufficient to provide several air changes per hour if desired. Special emphasis was placed on ventilating the gymnasium and locker rooms adequately.

The per square foot cost of \$13.85, somewhat above the national norm at the time of taking bids, is not comparable to the square foot cost of other schools because an exceptional amount of special equipment was included in the contract.

The Sunburst High School was erected at a total cost of \$513,623. At capacity enrollment the school can accommodate 225 students, making the per student cost approximately \$2283.

# Federal Aid to Education

*is generally  
a by-product of other  
federal activities*

**CHARLES A. QUATTLEBAUM**

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**T**HERE is a widespread misconception of the rôle the federal government is playing in American education today. Statements heard in different parts of the country indicate that many persons think the term "federal aid to education" embraces virtually everything the federal government is doing in the field of education. However, few of the numerous and varied federal activities in the broad field of education can be correctly considered federal aid to education programs.

From the time of its inception the federal government has been engaged in two kinds of educational activities. One of these is the operation of educational programs financed, controlled and administered by federal agencies. The other is the giving of aid to states, territories and specific localities for the support and promotion of education generally administered and controlled by the recipients of the aid. At present, federal activities of the first kind vastly outnumber those of the second kind. Furthermore, federal grants in aid to the states, territories and their political subdivisions for the

support of education account for only a small percentage of the total federal expenditure for activities in the broad field of education.

The primary purpose of a federal program in this field is seldom aid to or promotion of education as such. On the contrary, the educational programs generally are aids to the accomplishment of other objectives of the federal agencies that administer them. Whatever benefits accrue to the advancement of education from these programs are usually incidental.

In December 1951 I completed a comprehensive study of all the educational activities of the federal government.\* It revealed that during the fiscal year 1950 nearly every department and independent agency of the federal government was carrying out one or more educational programs. The instruction dealt with virtually every subject known to man. As a whole, the federal programs covered all levels of education from teaching illiterates to read and write to graduate training at the leading universities in the United States.

However, for the fiscal year 1950 the expenditure for the education of veterans accounted for about 81 per cent of the total estimated minimum

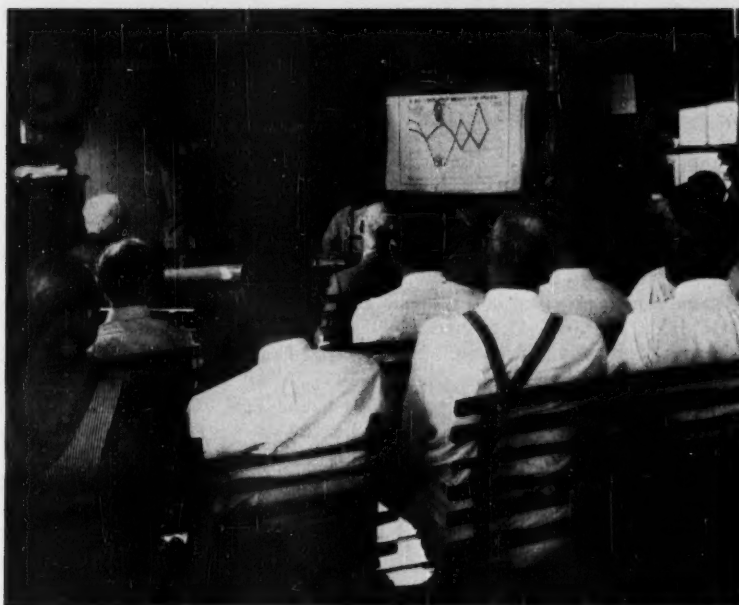
federal expenditure in the field of education, amounting to about \$3,600,000,000. The primary object of the expenditure for veterans' education was not the promotion of education but the benefit of veterans. The remaining portion of the federal expenditure in the field of education was principally for research at educational institutions and for the training of federal personnel, civilian and military, for the accomplishment of various federal objectives, mainly in the interest of national defense.

The departments of the army, navy and air force each administer educational programs involving federal expenditures several times greater than those of the United States Office of Education. The departments of the army, navy and air force and some other federal departments and agencies directly administer many of their large educational programs. The United States Office of Education, on the other hand, carries out its responsibilities principally through educational systems and institutions maintained under state authority. Consideration of this fact raises the questions: (1) Which method of administration of federal educational programs generally involves the greater measure of federal control? (2) Would it be feasible and more economical to achieve federal objectives in military, technical and vocational education through an en-

This article is based in part upon a comprehensive report entitled "Financing Schools in Federally Affected Localities," prepared by Mr. Quattlebaum for the committee on education and labor of the United States House of Representatives. Single copies of the full report will be available free from the committee, upon request, as long as the supply lasts.

\*This study was made for the committee on education and labor of the U.S. House of Representatives. The report was printed as House Document No. 423, 82d Congress, second session.





U.S. Department of Agriculture Photo

These farmers, who live in Dodge County, Nebraska, are receiving instruction provided by the federal-state-local cooperative extension service.

larged program of federal aid to the states?

There is no general, comprehensive program of federal aid to education. There is no program of federal participation in the financing of education in general. Each of the several federal aid to education programs is for the promotion of some particular kind of education or for the financing of education in particular localities or at certain levels.

**Federal aid to higher and adult education.** The principal program of federal aid to education at the higher education level is the federal contribution to the support of education in "agriculture and the mechanic arts" in the land-grant colleges, with attendant federal contributions to agricultural extension and to the maintenance of agricultural experiment stations in the states.

There is also the diminishing program for transfer of surplus property to educational institutions. This benefits, however, only those schools, colleges and universities which happen to be so fortunately located as to be able to utilize available surplus property. The question of whether this is a general program of federal aid to education is subject to dispute. In some respects it is a program of convenience to the federal government for obtaining the maintenance of the surplus properties, which the government

usually can reclaim in time of war or other emergency.

The principal purposes of the letting of government contracts for research at educational institutions are undoubtedly federal. Through the contractual arrangements the government obtains the findings from the research and the training of scientists, both in the national interest. The extent to which the institutions benefit from these contracts is a controversial question.

In the field of adult education, at all levels of educational attainment, the federal government has two programs of aid to the states. One is the cooperative agricultural extension service. The other is the program of federal-state cooperation in the vocational rehabilitation of disabled persons. These programs are largely educational in nature and purpose.

**Programs of assistance to elementary and secondary education.** At the level of secondary education there is, besides assistance to federally affected school districts, one outstanding program of federal aid. This is the program of federal-state cooperation in vocational education authorized by the Smith-Hughes and George-Barden acts. The United States Office of Education allots the appropriated federal funds for the promotion of vocational education below college grade. Part of the federal money may be used

for the training of teachers of vocational subjects and might be considered aid to higher education except that the ultimate purpose is vocational education below college grade.

Whether the program of federal assistance to the provision of school lunches in elementary and secondary schools should be regarded as federal aid to education is questionable. Public Law 320, 74th Congress, under which the program was started, did not mention federal aid to education or school lunches. Initiated in the donation to schools of surplus foods, for the purpose of aiding in price stabilization, the federal assistance since 1943 has been mainly in the form of cash payments to be used by participating schools to make local purchases of food. The stated purpose of the National School Lunch Act of 1946, under which the program now operates, is "to safeguard the health and well-being of the nation's children and to encourage the domestic consumption of nutritious agricultural commodities and other food." Nevertheless, probably few persons would maintain that this program is of no aid to education in the states.

#### FUNDS FROM OTHER SOURCES

Some of the states receive federal funds for schools from several other sources. As to whether the arrangements under which the states receive this money are forms of federal aid to education or are merely the payment of federal obligations or a part of these obligations is a matter of opinion. Part of the revenue from the national forests within a state is transmitted to that state for roads and schools. Three states—California, Oregon and Washington—receive about 65 per cent of the total amount thus transmitted. In accordance with the enabling acts for Arizona and New Mexico, the entire income received by the federal government from school lands situated within national forests in these states is returned to them for the support of schools.

Some of the states receive, for the maintenance of schools and roads, part of the revenue from federally owned grazing lands and mineral lands located within their borders. About a fifth of the states are affected by these arrangements, most of them only slightly in relation to their total school budgets.

**Assistance to federally affected school districts.** On Aug. 8, 1953,

President Eisenhower approved two bills, H.R. 6049 and H.R. 6078, which had been introduced by Rep. Carroll D. Kearns (R.-Pa.) early in July and were passed by the House and Senate near the close of the first session of the 83d Congress. These measures established new provisions for federal participation in financing the construction and operation of schools in localities particularly affected by federal activities. The new laws, Public Laws 246 and 248, 83d Congress, amend respectively Public Laws 815 and 874 of the 81st Congress.

Some persons, including members of Congress, have objected to calling these laws "federal aid to education" legislation. Their objections are based upon the implications of the term "federal aid to education." They do not consider that the philosophy underlying this legislation is the same as the philosophy basic to many federal aid to education proposals. They regard this legislation as merely a provision for federal payment of an obligation—federal shouldering of a part of the financial burden placed upon certain communities by federal activities, or a form of federal payment in lieu of revenue lost to the communities from federal ownership of property.

Public Law 246 adds to Public Law 815 a new Title III, the purpose of which is "to provide assistance for the construction of urgently needed minimum school facilities in school districts which, since the school year 1951-52, have had substantial increases in school membership as a

result of new or increased federal activities." The law authorizes federal payments as follows: (1) 95 per cent of the cost of providing minimum school facilities needed because of increases in enrollment of children whose parents live *and* work on federal property; (2) 50 per cent of such cost because of increases in enrollment of children whose parents either live *or* work on federal property (instead of 70 per cent previously provided under Public Law 815), and (3) 45 per cent of such cost because of increases in enrollment of children whose parents came into the district as a direct result of federal activity, if the school district is in an area meeting certain criteria. The Congress has appropriated \$62,000,000 for the first year's construction under Title III.

#### CONSTRUCTION ASSISTANCE

Public Law 246 also adds a new Title IV to Public Law 815 authorizing appropriation of \$20,000,000 for school construction assistance to certain districts enrolling substantial numbers of children who reside on federal property, even though these districts may not have experienced an increase in enrollments in recent years. These districts are mostly those which enroll large numbers of Indian children living on tax-exempt Indian property and which therefore have inadequate tax resources to provide the necessary school facilities. The initial appropriation for this title amounts to \$8,000,000.

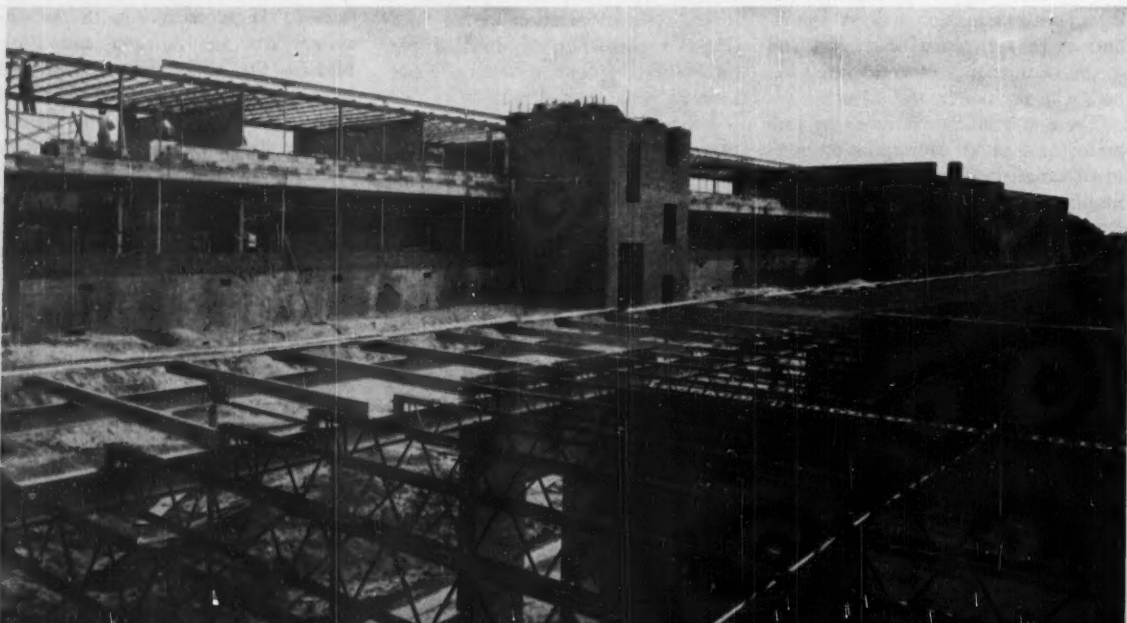
Public Law 246 also includes an authorization for appropriation of

\$55,000,000 to pay not more than 70 per cent of unpaid entitlements for school construction projects amounting to \$95,000,000 for which appropriations had not been made prior to the expiration of appropriation authorization under Title II of Public Law 815. However, there is a restriction on reimbursements. Congress has not yet made an appropriation under this new authorization.

It has been estimated that the cost of the federal program authorized by Public Law 246 for the two-year period 1953-55 will be about \$174,000,000.

Public Law 248, amending Public Law 874 of the 81st Congress, already has been mentioned in this article. The new law extends through the fiscal year 1956 the federal program of financial assistance for the operation of schools in districts especially affected by federal activities. Certain amendments to the law which will generally reduce about 25 per cent the entitlements of districts to federal help in meeting current expenses will not become effective until the fiscal year 1955. However, other amendments which have become effective for the fiscal year 1954 will increase the amounts some districts will be entitled to receive this year. Thus on July 1, 1953, the minimum federal payment for each federally affected child became one-half the state average expenditure per pupil from all revenue sources. The federal contribution rate otherwise is based on the cost per child from local revenue sources in comparable school districts in the same state during the second preceding year.

Now under construction at North Augusta, Ga., this school is being built partially with federal money granted because the district was affected by federal activities.





U.S. Office of Education Photo

These boys at Mount Sterling, Ill., are studying problems of contour farming. Federal aid is given for instruction in vocational agriculture at the high school level.

Another change that became effective July 1, 1953, is a provision that defines federal property so as to include properties owned by the United States and leased to a private contractor—even though the contractor's leasehold interest is subject to local taxation under state law. Taxes collected in such cases and available for current expenditure by the school district reduce the federal assistance by such amount.

On the other hand, another amendment, effective July 1, 1953, changes the provision requiring deductions of "other federal payments" available for current expenditures to authorize deductions from the payments under the act of amounts received from the United States Forest Reserve funds, Taylor Grazing Act funds, Mineral Lease Royalties and Migratory Bird Conservation Act funds, and so forth, only to the extent that children who reside on or with a parent employed on the property with respect to which such funds are paid are included in determining the amount which the applicant school district may receive.

#### PAYMENT FOR INDIAN CHILDREN

A provision of Public Law 248 authorizes the governors of the states before Jan. 1, 1954, for fiscal 1955 and before Jan. 1, 1955, for fiscal 1956 to have certain Indian children, neither of whose parents is regularly employed on federal property, included among children for whom entitlement for federal assistance may be claimed. The alternative would be federal payments for the education of these chil-

dren to continue through the Bureau of Indian Affairs under the so-called Johnson-O'Malley Act.

Public Law 248 makes changes in provisions under Public Law 874 for the education of children who reside on federal property for whose education local tax revenues may not be expended or for whom no local education agency is able to provide suitable free public education. In such cases the federal government provides education directly through schools located on federal bases under federal supervision or under contract with a local agency. The changes in the law are directed toward clarification of the relevant responsibilities of the Commissioner of Education or of the local contracting agency.

The Congress has appropriated \$66,500,000 for payments under Public Law 874, as amended, in the current fiscal year 1954.

**Proposals for further federal aid to education.** Current congressional proposals for further federal aid to the states for education are principally of two kinds: (1) proposals for "equalization" aid and (2) proposals for general aid to school construction. Bills of the first type are aimed at more nearly equalizing educational opportunities or teachers' salaries among the states and localities. Bills of the second type propose a less controversial form of federal assistance. Both types of proposals call for federal contributions to the states and territories according to prescribed formulas of need, without specific reference to areas particularly federally affected.

Proposals of both kinds are based largely upon the conception that the maintenance of a minimum standard of education is essential to the national welfare and that federal revenue sources should be utilized in part for the support of education, rather than only state and local revenue sources.

Besides these proposals there are pending bills to provide federal aid to education in specific localities or for certain people or in particular subject fields, and various other bills which in one way or another would promote education. Enactment of any of the proposed forms of federal aid to education might affect congressional consideration of proposals for other forms of federal participation in financing education.

President Eisenhower has said he favors federal aid to "needy states" for school construction in general. He has also spoken in favor of "adequate" federal aid to education in general in any particular section that does not have "the proper adequate means" to educate all its children to the level needed for participation in the political activities of our government. He has urged careful congressional study and action concerning the whole situation of our school system.

It appears that a proposal for the less controversial type of legislation, which would provide federal aid for school construction in areas of low economic ability, is more likely to be enacted than the more controversial type of proposal for federal participation in financing the operation of schools throughout the nation.



# School administration improves when Administrators and professors join hands

**JOHN A. RAMSEYER**

Director, The Cooperative Program  
in Educational Administration in Ohio

**C**AN school administrators help universities build a better program for their own preparation and continued growth? Ohio's answer to this question is Yes.

From the advice of administrators in Ohio schools have come these additions to the preparation program at Ohio State University: a plan of internship; a workshop on human relations and decision making; a workshop on community interaction, which included laymen as participants; a seminar on administrative problems bringing together professors of sociology, economics and education; a series of five-day conferences sponsored jointly by the university and professional associations, and the creation of 12 field laboratories for an intensive study of educational problems in a local setting. And the administrators urged the colleges and universities in the state to cooperate closely in serving present and future administrators.

## **POINTS OUT DIRECTION**

These results—two years after the Ohio C.P.E.A. center invited administrators to assist in such a venture—show something of the direction preparation programs for educational leaders should take, according to the men and women now on the job.

The administrators' first response to the invitation, "Let's get together on this," was a frank discussion of the problems they encounter in their school systems when faculty and lay groups become increasingly involved in decision making. "It is not enough," they said, "to teach that all who are affected by decisions should participate in making them." As administration is further democratized, how can participating groups be helped to assume appropriate rôles in this process? Surely intelligent action does not con-

sist of merely inviting groups to act on matters of greatest concern to them. Using the competence of lay groups, of boards of education, and of the faculty requires more than clichés and generalizations about wider participation; it requires insight into the competence of these groups, their motivations, and their skills in the group process. It requires rethinking the rôle of the educational administrator, the nature of his responsibility, and where authority resides. It requires that the administrator understand his own motivations, that he develop not only an understanding of the purpose of wider involvement but also a skill in using it effectively to improve education.

With this kind of straightforward advice from the field, the professors designed a workshop to help the beginning administrator improve his competence in the field of human relations. The planning committee for the workshop was composed of both professors and administrators. The staff consisted of one college professor, one superintendent of schools, and a supervisor of elementary education. Its report shows how this workshop group attacked the problems which more experienced administrators anticipated for it. A follow-up study of their experiences during the next year shows the earnestness with which the participants applied their learning to situations in their local communities.

## **WORKSHOP FOR LAYMEN, TOO**

During the past summer a number of these same administrators attended a second workshop on "Community Interaction." As in the first workshop, the experience of administrators in dealing with community agencies of various kinds was used as a basis for planning the learning experiences for the members of the group. Again, the

staff included practicing administrators as well as university personnel. Representatives of community groups were brought to the workshop to participate in thinking about their rôles in improving the educational programs of their communities. A follow-up of this experience is planned.

Other examples of direct and immediate field-campus cooperation in improving instruction in educational administration exist. When leaders in education implied that the beginning administrator lacked certain types of desirable experiences, the university established an internship in educational administration. Certain public school systems in cooperation with the university provide opportunities for prospective administrators to learn by experience some of the intricacies of administration. Joint supervision provides for cooperative guidance by an experienced school head and a professor who represents the university.

## **INTERDISCIPLINARY SEMINAR**

An interdisciplinary seminar in educational administration was designed to help solve another problem exposed by Ohio administrators. This involved the need for the educational leader to take into account certain sociological and economic factors in solving local problems. Eight administrators responded to the call to participate in an experiment to bring the departments of sociology, economics and education together to work on problems requiring their combined competence. The participants of this seminar judged this experiment so successful that they recommended an increase in the number and variety of such opportunities. For more than a year the committee on educational administration at Ohio State University has been trying to identify the competence required of

educational administrators. This is to serve as a basis for determining the nature of the preparation program. Throughout this process a jury of state department personnel, administrators and teachers has given valuable time and thought to validating an instrument for identifying competence.

During this period of thinking and working together, administrators have become increasingly aware of the need for their continued growth in service. Last year, the professional relations committee of the Ohio Association of School Administrators called a conference to study this problem. The Ohio C.P.E.A. staff, the state department of education and the universities were asked to assist that committee. Interest in this project has grown throughout the year and spread to other professional groups. One instance of this is the growing interest of county superintendents in studying their rôle in the improvement of instruction. Last spring this group held a four-day work conference on these problems.

#### **SHORT-TERM CONFERENCES**

Universities are seeing an increasing need to cooperate with professional groups. They are responding to it by taking more active parts in planning with these groups and assuming leadership in instructional phases of their conferences and workshops. The number of short-term conferences and workshops for administrators who are on the job has increased greatly during the last two years. Last summer Ohio State University held a five-day conference on school law; busy administrators could attend one, two or more days as their schedules permitted. This fall a similar conference is planned to permit administrators to exchange experiences in school district reorganization throughout the state.

To prepare more adequately for their responsibility in developing school leaders, the nine universities in Ohio offering graduate work in educational administration are cooperating in a study of their common problems. Representatives from these universities have been meeting regularly to (1) assess programs of preparation of educational administrators, (2) study working relationships with professional organizations, (3) examine research in educational administration, (4) develop cooperative working relations among themselves, and (5) experiment with changes in their graduate programs in this field.

### **The school administrator can give a hand to colleges if he:**

- 1. Takes part in cooperative research**
- 2. Accepts intern administrators**
- 3. Invites college teams to observe in local schools**
- 4. Shares his firsthand experiences with students in workshops and classes**

Less direct and more long-range cooperation of school leaders in changing instruction in administration is represented by their participation in the research program and field laboratory studies developed by the Ohio C.P.E.A. center during the last two years. When asked to supply information concerning their preparation and experience, 131 of the 136 city superintendents responded. Two-thirds of all Ohio administrators returned questionnaires to supply the C.P.E.A. staff with valuable data on patterns of preparation. Certain findings from these studies can hardly be ignored as revisions in university programs are being made. The discovery was made that administrators have had little preparation or experience in elementary education and curriculum development. Administrators and professors alike express concern over the fact that specialization in certain phases of the administrator's duties may come too early in the total preparation program. Research corroborates the early impression that greater attention should be given to problems in human relations and leadership in group thinking and action.

#### **FIELD LABORATORIES FUNCTIONING**

The response to a request to establish field laboratories was equally gratifying. During the last year, by mutual agreement of the local school head, the teachers, the board of education, and a responsible lay group, project coordinators and university personnel have been working hand-in-hand with local leaders in six counties, four cities, one exempted village, and one local district school to get firsthand knowledge of problems and their solutions.

Some of these studies have been intensive analyses of problems in educational administration, while others

may be characterized as experimental efforts to improve leadership at the local level. The behavior of consultants who have worked in these situations reveal a great diversity among university people in understanding of the consultant's rôle. Variance exists, too, in the ability of administrators, teachers and other leaders to use consultation wisely. It could be possible that both groups need to understand more clearly what factors produce change and what constitutes evidence that these factors are deeply rooted in the situation where the change is to take place.

#### **TWO-WAY GAIN**

Satisfaction accruing from the more successful field experiences suggests growth on the part of both groups. Local school heads are depending less upon a recommended solution to problems and more upon assistance in problem analysis. The university participants report that as a result of this experience in the field laboratory they bring new insights to their work on campus. In some instances new teaching materials—case studies, practical illustrations, new resources for class use — are developing. There is some evidence to support the conclusion that new interests in research are developing. Certainly there is a growing awareness that keeping an eye on the field situation can become an effective means of relating theory and practice.

Thus far the Ohio experience tends to suggest that there are at least three ways in which the practitioner can help improve instruction in educational administration. The first is through the pooling of opinion and judgment that results from many years of analysis of firsthand experience. Some of these practical suggestions find ready application and adaptation

to the college program. A second means is that of encouraging and participating in those evaluative or research projects which are designed to determine the effectiveness of the program. The third is by opening the door to a team approach to live problems inviting the collective intelligence of the theorist and practitioner to work out solutions cooperatively.

These are not automatic and fool-proof devices that work in any setting. It is my opinion that they work only in a climate of mutual trust and confidence. Each of the two parties sharing in the venture—administrators and professors—must desire to be helpful to the other. There must be faith in the cooperative method. Each group must believe that it can learn from the other. There must be the common belief that both the public schools and the universities share responsibility for upgrading the profession, and that they must do it together.

In Ohio it is assumed that the state department of education, school administrators, and university professors of educational administration are the basic leadership groups in this field. The C.P.E.A. staff has always recognized the potential power that could develop from their cooperation.

When representatives from the nine universities participating in the C.P.E.A. program began to meet together they recognized the benefit to be derived from thinking together about programs. Soon the state department saw this group as being one that could help develop the certification program for the state. Professional organizations began to see C.P.E.A. as an agency that could coordinate joint effort with the universities. A concern for coordination of in-service education has brought a number of groups together. Virtually all of the projects reported at the close of the second year of work in Ohio show the involvement of all of the basic leadership groups.

As yet no new permanent organizations have been built in Ohio as a result of C.P.E.A. effort. None has been eliminated. Some groups have taken a new look at their purposes and the methods being used to achieve them. This evaluative look is probably the greatest force for professionalization that can be cited anywhere. Perhaps three kinds of effort, in addition to that already mentioned, will tend to enhance the cooperative work already demonstrated.

The first is one of coordination. An examination of the program throughout the state suggests that there may be unnecessary gaps and duplications among agencies in research, preparation programs, in-service projects, and the initiation of legislation.

The second is a further definition and delineation of rôles. That is, each leadership agency ought to have a clearer understanding of the functions of the others in this total program. The Cooperative Program in Educational Administration can do much to assist these efforts in the years immediately ahead.

A third responsibility should be considered. Since further profession-

alization of educational administration is coming to be seen in Ohio as a joint responsibility of the state department of education, the universities, and the professional administrative organizations, adequate provision should be made for joint planning among these groups. Several years of experience in planned cooperative effort may suggest an organization or plan of action by which such leadership groups in the state may continue to support one another and to work together on a common professional task. To accomplish this is one of the important goals of the Cooperative Project in Educational Administration in Ohio.

## **When must a school district provide transportation?**

**LEE O. GARBER**

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**S**CHOOL boards are frequently faced with the problem of deciding when to provide transportation to and from school for pupils enrolled. If the law specifically requires a board to do so, no question is involved. The duty, then, is a mandatory one, and the board must provide the transportation.

Sometimes the law makes the providing of free transportation optional on the part of the board. In such case there is seldom any difficulty in deciding how to resolve the question. The board may then use its own discretion, and the courts will not interfere in the absence of evidence that it acted in an arbitrary and capricious manner. Sometimes, however, the statute makes the providing of transportation mandatory upon the board under certain conditions. It is in such cases that questions are most likely to arise. The question is often that of determining when the

conditions which make the providing of transportation necessary are present. Here, again, the board is faced with a matter requiring its decision, and the courts will not interfere unless the board is guilty of a discretion abuse.

A Kentucky law is illustrative of the type of statute that requires a school board to provide transportation, but only under certain conditions. It makes mandatory the furnishing of transportation to elementary pupils "who do not reside within reasonable walking distance of the school provided for them." In carrying out the provisions of this law, a school board must decide what constitutes "reasonable walking distance" for an elementary school child. Because of dissatisfaction on the part of parents over the way school boards have, at times, decided this question, considerable litigation has been foisted. Recently a case involving this



question was decided by the court of appeals of Kentucky.\* It is considered here in the hope that the reasoning of the court, together with certain general criteria it laid down, may prove of value to other boards of education that face the same or similar problems from time to time.

#### PERILS OF THE ROAD

In this case an action was brought against the Jefferson County Board of Education to require it to furnish transportation to the Orville J. Stivers Elementary School for pupils residing in certain neighborhoods at a distance of from 1 mile to 2¼ miles from the school. This particular school is located near Louisville. It is near the eastern boundary of the city, and it serves a comparatively populous suburban area. The school itself is not centrally located with reference to the most heavily populated section in the district but is somewhat northeast of the center. As a result, pupils are forced to travel varying distances along open county roads in order to reach the school.

Some of the roads the children have to travel carry considerable traffic—one road averages one car every 10 seconds in the morning and one every 20 seconds in the afternoon. Others carry considerably less traffic—one averages one car per minute in the morning and one every two minutes in the afternoon. One group of children has to travel a road that is narrow, averaging 11½ to 13 feet in width with 2 or 3 foot shoulders for a distance of some 2000 feet. On this section it is necessary for one car to pull off onto the shoulder when meeting another. On this particular road, the width of the road is the chief hazard—it is this road that has the traffic count of one car every minute in the morning and one every two minutes in the afternoon. Another group of children has to travel a road which crosses some railroad tracks upon which are scheduled two trains in the morning and two in the afternoon which might be running at the time children are using the road.

At one busy intersection the school has stationed safety patrol boys. At another a county traffic patrolwoman is stationed to help children across the street. Another factor that entered into the picture is that common carrier bus transportation is available that carries children to a point about 1000 feet

from the school. The fare for pupils is 5 cents without a transfer and 6½ cents with a transfer. School patrol boys are assigned to and ride these buses to assist the younger pupils.

On the basis of these facts, the lower court ruled for the plaintiffs and entered a judgment against the Jefferson County Board of Education requiring it to furnish the transportation. On appeal, the court of appeals reversed the lower court and ordered it to set the judgment aside and dismiss the plaintiffs' petition.

In its ruling, the court discussed the responsibility of the board, under the statute, for providing transportation and said:

"The board of education necessarily must be allowed some discretion in determining what is a reasonable walking distance in any particular situation,



and the courts should not interfere unless the board has acted in an arbitrary and unreasonable manner in refusing to furnish transportation."

In arriving at its conclusion the court first made it clear that, in this case, "distance alone . . . is not unreasonable"—the range is from 1 to 2¼ miles. However, it then went on to point out that distance was not the sole criterion to be considered in interpreting and applying the statute. It stated "that hazards and conditions of the roads that must be traveled are factors to be taken into consideration in determining whether a particular distance is a reasonable walking distance."

In their arguments the plaintiffs cited *Schmidt v. Payne*, 199 S. W. (2d) 990, 304 Ky. 58, a similar case, in which the court had required a school district to provide transportation petitioned for. In considering this case the court pointed out that there "the children would have been compelled to walk along a crooked, winding, heavily traveled road, crossing a narrow bridge, a railroad, and a main federal highway." In contrasting the hazards presented by the two cases it said: "The hazards in the case now before us are not comparable to those in the . . . [Schmidt] case."

Along this same line, the court pointed out the difficulty involved in trying to draw facts and conclusions from one case and applying them to another. It made the point that locale and circumstances must be considered in arriving at a decision in any particular case, and in so doing it set up some criteria. The court said:

"In a suburban area, such as this, children are exposed to the hazards of traffic in any of their outdoor activities. They will be upon the streets in play, in visiting their friends, and in going to the stores. They early in life must be trained to take care of themselves. Public bus transportation is a common convenience to them.

"The situation of the suburban child is much different from that of the country boy, who ordinarily is not upon the highways on foot except in going to and from school, who is not conditioned to the hazards of constant automobile traffic, and who has no means of reaching school other than on foot or by school bus."

As a result of its reasoning along these lines, the court ruled that "the hazards presented here are not of such magnitude as to make it mandatory upon the board to furnish transportation." It considered each of the various main hazards and commented upon them as follows: "Westport Road [the one where traffic averages one car each 10 seconds in the morning and one every 20 seconds in the afternoon], itself presents no unusual dangers, and we do not consider the railroad tracks as being sufficient, alone, to require bus transportation to be supplied. Massie Avenue [the road that is between 11½ and 13 feet wide in one stretch of 2000 feet] is narrow, it is true, but the traffic upon it is not heavy."

#### CONSIDER TOTAL SITUATION

It is interesting to note that the court recognized and took into consideration all elements of the situation as it saw and interpreted them. A school board faced with the problem of deciding a similar question might well take its cue from the court. It, too, should carefully examine the total situation before arriving at its decision. If it does, and if it is not arbitrary in the matter, it is more than likely to find itself on safe ground. Courts are in general agreement in holding that they will not interfere in matters involving the exercise of a board's discretion unless the board has acted arbitrarily.

\**Bowen et al. v. Meyer et al.*, 255 S. W. (2d) 490 (Ky.).

# CHALK DUST



## NEWS NOTE

THE CANADIAN NEWSPAPERS have just published the sad story of Wilf Perreault of Mount Joy, Ontario, who, fed up, has resigned from his job as the town's police chief, fire warden, dogcatcher, tax collector, pound-keeper, building inspector, liquor inspector, fence viewer, cemetery inspector, weight inspector, and school attendance officer.

To the average school superintendent it looks as if Wilf had a pretty soft job with no responsibilities for school buses, charity drives, juvenile offenders or Parent-Teacher Associations. Nor is there any demand that he sing in the choir or speak in behalf of all charity drives.

Some folks never had it so good!

## REPORT FOR NOVEMBER

U.S.A., Nov. 26, 1953.—The weather here has been generally mild, and Indian Summer has been particularly beautiful this year, but now the mountains in the northeast and the west have put on their nightcaps and gone to sleep. Along the northern border, too, there has been a flurry of snowstorms, but the temperatures from Virginia south to Florida have been summery beyond wonder.

Most of the schools are closed for a couple of days' vacation. The school celebrations yesterday were a great success, and the cafeterias really outdid themselves in providing special treats for everyone. The drawings on the blackboard of turkey gobblers and horns-of-plenty and Pilgrims-landing-on-the-stern-and-rock-bound-coasts added their special note of color. It looks like the turkeys get bigger and fancier every year.

All of the schools are not closed, however. Up in New England, where the traditions are strong and everlasting, many of the kids are meeting today for song services and the exchange of gifts. Down in the South some schools are staging patriotic pageants. In Tuscaora, N. Y., and probably a hundred other little communities, the parents are assembled to inspect and admire their new school building.

But, in general, it is pretty quiet and altogether peaceful and, somehow, solemn and reverent. For today is an important Thursday in November and, turning from the work-a-day cares and worries, a great nation gives thanks for its blessings.

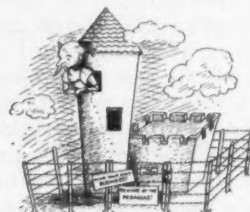
In this great chorus of thanks the schools have their special place. We in education are thankful for schools built and a-building, for public support and understanding, for teachers dedicated to their work, and for the opportunity to teach without fear in a land of freedom.

## ALICE IN WONDERLAND

### The Closed Gate

AS HE DONNED his battered helmet and adjusted his spurs, mousetraps, honey pots and other necessary accouterments of his new position as superintendent of the Wonderland schools, the White Knight took stock of his unenviable situation. The ivory tower in which he was isolated was completely hedged in by a high fence beyond which the common folk were disporting themselves.

There was no way the people could reach him even if they wanted to. The only break in the fence was a forbidding barbed wire gate labeled with warning signs: "Keep Off the Grass," "Beware of the Pedagog," "Mind Your Own Business," and other unfriendly admonitions. In addition, great mountains of moldy annual reports and rusty duplicating machines blocked the gateway.



"The problem," said the White Knight to Alice, pompously, "is to get over the gate and meet the people. I think I have invented a way."

Quickly he called in his public relations department and jingled his Phi Beta Kappa key. "The difficulty is with the feet," he explained ponderously. "The head is high enough as it is. Now, first, I shall put my head on the top of the gate, then stand on my head, which makes the feet high enough, then I fall over."

"Yes, I suppose you might be over when that was done," said Alice thoughtfully, "but don't you think it would be getting there the hard way?"

"No one has ever actually tried it," admitted the White Knight, "but the books and public relations men are insistent that it can be done."

It was evident that there was a crisis on the other side of the gate. Several groups, led by citizens committees, had donned gas masks and were making an attempt to clear away the unpalatable verbiage of the annual reports.

"They want in, they want to help you," exclaimed Alice.

"What shall I do?" wailed the White Knight in despair.

"Why not try opening the gate and walking through?" said Alice.

"Such a solution," said the White Knight superciliously, "has never been explored by the pedagogs. It is probably unprofessional." So saying, he pulled down the shades and returned to his curriculum.

# Some proposed changes in RETIREMENT PLANS

JOHN M. CLIFFORD

Secretary, Michigan Public School Employees' Retirement Fund Board

**Second in a series of three, this article analyzes problems of reciprocity, survivor benefits, liberalization of benefits, and the proposal to gear annuities to a cost of living index.**



**M**ORE frequently in recent years teachers have been proposing that retirement benefits ought to be geared to the cost of living. Thus far the idea has received little favorable consideration from state legislatures, but it is worthy of careful consideration.

The great change in the value of the dollar has brought hardship to persons living on fixed pension income, particularly if the individual retired 10 or 15 years ago when salaries were low. The amount of a retirement benefit generally bears a direct relationship to the salary earned. Fifteen years ago a pension of \$100 per month was considered generous. Now it buys little.

When confronted with this problem the typical actuary or pension fund administrator says something like this: "We are operating a retirement system. We are paying what we agreed to pay. To do anything else would wreck the financial soundness of our plan." All this is true, but it does not offer a solution for the retired school employee whose allowance was fixed years ago.

One suggested solution has been that the state legislatures ought to make specific appropriations to cover increases for persons already retired. This is an excellent idea if the state legislatures can be influenced to make the supplemental appropriations.

In Connecticut the 1953 legislature passed an act which authorizes the state treasurer to make increased payments to retired teachers for the 24 months ending June 30, 1955. The increases provide for a minimum payment of \$85 per month for anyone who retired after July 1, 1943, and they provide a

flat \$35 per month increase for persons who retired before 1943. It is to be noted that the increases are authorized for two years only. Succeeding legislatures will need to provide further appropriations if the higher rates are to continue.

Detroit police and firemen have a unique clause in their retirement plan. In Detroit, whenever the salaries of policemen and firemen are increased, the retired policemen and firemen are given a similar percentage increase in the amount of their pensions. With this as a precedent, the Detroit teachers recently asked the state legislature to amend the Detroit School Employees Retirement System so as to provide for an increase in the retirement allowance on a percentage basis whenever the maximum salary for a classroom teacher with an A.B. degree was increased. This plan to gear retirement allowances to the salary for a classroom teacher was not adopted. However, in the future it may be possible for school retirement systems to work out some sort of a plan whereby the amount paid in the form of pensions will change with the fluctuations in the purchasing power of the dollar.

## RECIPROCITY

Reciprocity or migration is another problem facing school and retirement administrators. This question is of particular importance to a school administrator. When the superintendent or principal crosses state lines he faces possible loss of retirement benefits. Also, superintendents often find themselves unable to hire a competent

teacher from another state because the teacher fears a loss of retirement benefits. Most states require a minimum number of years of service in that state, and they limit the amount of credit allowed for service in another state. Some states require an exorbitantly high payment for out-of-state service credit. The result is a barrier to the free movement of administrators and teachers across state lines. This handicaps the individual, since it keeps him from deserved promotion. It also can handicap schools by preventing them from getting an individual who is especially qualified for a special situation.

## COMPLEX PROBLEM

The solution of the reciprocity problem is complex. The application of social security to school employees would afford a partial answer. Everyone would then have a basic coverage regardless of where he served. A system of credit exchange between states would afford further relief. Deferred benefits offer another solution. Under such an arrangement a person with five or 10 years of service would acquire deferred benefits. At the time of his retirement the system under which the service was performed would pay an allowance on the basis of the service in that state. If this arrangement became universal a school administrator could serve 10 years in one state, move to another for 10 years, and then move again and serve 10 years. He would then receive three checks at the time of retirement.

To permit a retired school employee to protect his dependents, many states





now allow a retiring employe an optional method of settlement at the time of retirement. Ordinarily this is used by a man to protect his dependent wife, though it may be used by a woman teacher to take care of an aged relative. Under this arrangement, generally referred to as "option benefits," the retiring teacher elects a full benefit which terminates at death, or he may elect instead a reduced benefit with the understanding that it will continue for as long as either he or his beneficiary survives. In retirement and insurance language this is known as a "joint and last survivorship allowance." The amount of the reduction in the allowance depends upon the ages of the two individuals. If the wife is considerably younger, there will be a sizable reduction if an option election is made. Option payments work on the theory that there is no cost to the state. The idea is that on the basis of life expectancy it is possible to predict the amount that is likely to be paid to a retiring school employe. When an option is elected, this amount is then divided upon the basis of the combined life expectancy of the two individuals.

Originally, option benefits were available only at the time of actual retirement. Then the laws were amended to permit a person to desig-

nate a beneficiary as soon as he was old enough to retire. This permitted a person to continue in service without the fear that if he died his widow or other dependent would be left without protection. Even more recently certain states have made option benefits automatic after a certain number of years of service. If an individual dies in service after having been employed for 20 or 25 years and provision for automatic options is made in the law the benefits automatically go to the widow. The amount of the benefit depends upon the age and service record of the person who died and upon the age of the beneficiary. This automatic option affords a great deal of protection for men who have served the schools for a number of years.

#### WITHOUT PROTECTION

Since the payment of option benefits always is contingent upon a number of years of service (usually at least 15 and often 25), the younger men are still without protection. Further, option benefits, since they provide a reduced allowance, go on the old idea that two can live cheaper than one. Everyone knows that this is not the case. But, as noted, there have been distinct improvements in recent years in the matter of providing survivors' benefits. The teaching profession will need to

consider the possibility of making still further changes in this respect.

Liberalization of the retirement plan is something that teachers and school administrators are constantly asking for today. It is easy to understand this in view of current economic conditions and the rapid change in the purchasing power of the dollar. Attention has already been called to some of the difficulties connected with attempting to gear retirement benefits to the cost of living. The attempts to liberalize the retirement plan concern those already retired and persons still in service. In some respects those already retired have more cause for complaint than those who are in service. Most retirement allowances are directly related to the salary earned. Retirement allowances are frequently based on a five-year salary average. Thus those retiring now or in the future at least get a degree of liberalization in that their allowance is computed on the basis of present salaries.

Many retirement systems place a definite maximum limit on the salary upon which contributions can be made and upon the salary used in computing pensions. These limits were often established 10 or more years ago, and they are unrealistic in terms of today's conditions. Top limits on salary used are often \$3000 or \$3600 and sometimes only \$2400. The result is that pensions are in effect limited to from \$1200 to \$1800. The direct ratio of half salary does not always prevail, but it is quite common. Where there is a top limit on the salary used in computing allowances there is now a good reason for asking the legislature to increase the figure.

#### LIBERALIZATION OF BENEFITS

Liberalization of retirement benefits needs to be based upon sound financing. The same actuarial principles used in establishing the fund should be continued. Abandonment of the reserve basis in order to increase retirement benefits means either that future benefits are jeopardized or that the taxpayers will eventually have to make exorbitantly high payments to continue the benefits. The liberalization of a retirement system should not be undertaken until after all factors concerning the increased costs have been determined.

**NEXT MONTH:** The last in this series of three articles will discuss changes in retirement laws made during the 1953 legislative sessions.



## Democracy is finding new expression in

# LOCAL CONTROL of public schools

**JOHN H. NICHOLSON**

Director of Instruction  
Kansas State Department of Education

**W**HY is school administration in such a volatile state in 1953? Why do school administrators suddenly find themselves in the vortex of a community storm when they were often not even aware that storm clouds were gathering?

My belief is that school administrators are being caught unaware of the precise stage in the evolution of the democratic ideal in the communities they serve. We are in trouble because the American people are just beginning to realize the rightness of the democratic concept and, more important, because they are learning how to operate this social instrument at the local level. Operation is easiest in this most democratic of all social institutions, the locally controlled public school.

The public school has been the greatest exponent of the ideal. We are being caught up by a public realization of the truth and rightness of a concept that we have been teaching and demonstrating.

### PROMISE OF DEMOCRACY

The American public is still frustrated and balked by "big" government, state or national, realizing that the limitations of time, distance and numbers of people involved make practical applications of the democratic concept more difficult. The people have seized upon the public schools as the unit of government in which they can actually realize the great promise of cooperative, democratic action.

Pupils and teachers, too, have been affected to the extent that they often join with other community forces that reject the leadership of an administrator who has inaccurately judged the temper of his locality.

Administrators who have understood this least have already been

caught one or more times, sometimes managing to build defenses and weather the storm temporarily but usually losing out in the end. Those who have understood it best are sometimes barely able to keep ahead of the forces that push them inexorably toward administrative leadership that takes account of all social forces operating in our society.

**How did we get this way?** The wheel of social progress moves slowly, but it never stops. Our problem is to take a flash picture that may reveal where we are at any moment in the evolution. Perhaps even the elements that brought us to this point may be revealed partially by an examination of the historical development of school administration as a science.

### UNPROVED SCIENCE

It must be understood first that educational administration is a new and relatively unproved science. The first superintendency was created in Buffalo, N.Y., in 1837. Virtually all of the development in this difficult field of endeavor has taken place since 1850. The first hundred years are the hardest!

Schools of education have developed professional courses leading toward degrees in educational administration, but these have in a sense been "inbred" because no other field of public administration required such large numbers, and opportunity has been given in these other fields for development on an in-service or apprenticeship basis. Many of the aspects of the school administrator's job are similar to those facing business management and other professions, but in the main the professional pattern of preparation has been isolated into *educational* administration.

This isolation continues out into the community level. Often the schoolman

stands alone while business management and other professional associations form themselves into groups for the advancement of their professional lives. Memberships in civic and social clubs help the schoolman little because their major efforts are directed toward community betterment or social purposes.

### ROBINSON CRUSOE

So we find the school administrator in the position of Robinson Crusoe before he found his man Friday. His position has developed from one in which he was expected to purchase chalk and desks, keep an accurate account of pupil attendance, employ qualified teachers, and give strict accounting for the finances of a school district to one that requires technical and social skills of the most complex nature. Small wonder that his brow is wrinkled and he feels harried!

Further insecurity comes from the fact that there is so little legal basis supporting the superintendency. In most states legal powers relating to education are delegated by state legislatures to electors and to boards of education. An astonishing lack of even the most basic legal framework for school administration will be found in most states.

This would not necessarily be bad if electors and boards of education would learn what powers they should, in turn, delegate to the administrator. What is needed is a clear delineation of duties and responsibilities with commensurate powers to carry them out.

A third understanding should be based upon an examination of the origins of the principles of administration. Where could school administrators of the 1850's look for ideas? Why, to the military and to big busi-

ness! It was primarily from those fields that we got our ideas of how to administer. It was there that we got our ideas of the "boss" who made decisions with lightning rapidity. He issued orders, and they were carried out by subordinates. No one questioned his authority, and he was most admired when he was "decisive" and when he gave the appearance of absolute domination and control.

It was largely from these origins that we got our ideas of "rank" and the "line and staff" relationships in school systems. Rank assumed such proportions that in some schools it was considered impertinent for a teacher to suggest an idea. The administrator of such a school dared not cooperate or seek the cooperation of others. To do so would have been interpreted as weakness or loss of control.

This paradox of a democratic social institution developing under authoritarian administration provides one more example of the capacity of a dynamic society to advance even when in conflict with itself. The stronger force eventually takes precedence.

**Where are we now?** It should be reasonably clear even to the most reluctant observer that the authoritarian method will not work in the public schools of 1953. We have come too far toward a realization of the meaning and the method of cooperative action. Unless the administrator finds ways to direct the forces about him to constructive ends, he will find the engineer being chased by the machine. Staff energies and abilities must be used. Student groups must be brought into planning and carrying out policies. Community forces must be used. This is the imperative of our time.

#### USING THE EXPERT

Along with extended use of school and community resources, both administrators and the public must learn more about when and how to use the expert. School administrators have failed almost as badly as the general public at this point. Private enterprise has made great strides by intelligent use of research and technicians, but in the conduct of public affairs there has been suspicion and prejudice against those who really know a great deal more than most of us.

There is no violation of group decision or cooperative action when technical advice is asked and used. The

people can and should make decisions about education, but they must be taught to have confidence in experts and in scientific research to supply technical information. Their distrust can be laid in part to disillusioning experiences where pretenses of expertness or scientific findings have not been borne out by subsequent events. The street corner philosopher sometimes assumes the mantle of knowledge concerning the content and method of teaching. Decisions about chemical properties of floor wax or the effect of certain abrasives used in cleaning are hardly the responsibility of most school administrators, and certainly not of most school boards.

#### NOT DEFENSELESS

Fortunately, we are not defenseless. There are many examples all about us that should lend encouragement. We are not alone. Organizations, institutions and individuals are writing and doing things that can be of help. In the publications the following might be noted:

1. The American Association of School Administrators has made a valuable contribution, particularly with its latest two yearbooks: "The American School Superintendency" and "The American School Curriculum."

2. Current literature is full of examples of educational "leadership" in contrast to "administration." This change of name is more significant when it results also in change of content. "Emerging Programs for Improving Educational Leadership," a report of the third work conference of the National Conference of Professors of Educational Administration, is an interesting example of this change.

3. The communication of ideas is the subject of several recent books and of many articles in current periodicals, both professional and popular.

4. The hard core of "group dynamics" cannot safely be ignored by school administrators, and there is much material which is usable by non-technical methods.

5. The forces affecting American education have been analyzed in several recent publications. Most notable example is the 1953 yearbook of the Association for Supervision and Curriculum Development.

Other hopeful signs are the activities of various groups over the nation. School administrators should be making use of the activities of such groups as the following:

1. The Cooperative Project in Educational Administration. This is sponsored by the A.A.S.A. and the Kellogg Foundation.

2. The National Citizens Commission. This movement will grow either with the schools or in spite of them.

3. The administrative workshop idea. This is sponsored by many colleges and universities in every state in the nation.

4. Community councils. These councils pool all community agencies and organizations that affect education.

5. Growth of area "clinics" among school administrators. Administrators, including superintendents, principals, supervisors and sometimes board of education members, get together monthly to avoid the "Robinson Crusoe" difficulty. Usually from five to 15 members is the limit.

6. "Interdisciplinary" committees in colleges. This means that education works together with engineering, political science, sociology, anthropology to seek a solution to a complex problem.

7. Use of "consultative services" available within a region. This is one of the major projects of the Midwest Administration Center of the C.P.E.A. In Kansas a special bulletin is being prepared on this subject.

#### "PARTIAL SOLUTIONS"

I suggest that "partial solutions" can be realized in two ways: First, individual local administrators accepting, at least in part, the idea that there are better ways than have ever been invented to make use of the intelligence of all school and community forces could start today to find these ways. They need not so much to know how as to learn how. Second, we could organize into small area groups to practice with ourselves the art of cooperative search for answers and group decision.

The democratic idea has persisted through many hundreds of years. We are only now at a point in its evolution at which we can begin to feel more confidence in the operation. Present events are forcing us toward this conclusion.

The great issue before American school administration might be stated in these terms: When and how and to what extent can we use the idea the public school has so long advocated—that intelligent use of ideas and human energy is the chief responsibility of the public school?





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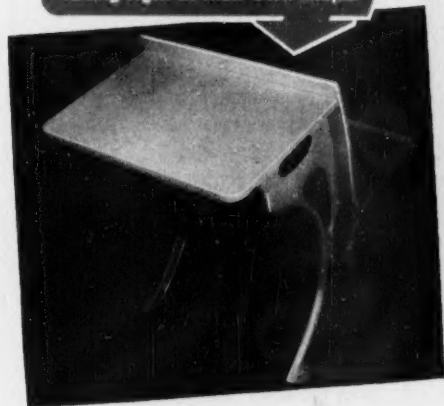
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## "Bell and Book"

### Commercial radio station brings school news to public

**VIRGINIA TAYLOR**

News Editor, Radio Station WLIP  
Kenosha, Wis.

ONE Wisconsin city is trying an experiment in bringing school news to the public which is proving, at the same time, an excellent way for the schools to reach the citizens and each other.

This is "Bell and Book," a 10 minute program of school news presented five mornings each week by WLIP, the radio station at Kenosha, Wis.

The program is devoted exclusively to information pertaining to schools and students, teachers and parents. The news items come from the school administration office, the teachers, the

P.T.A., the students themselves; from outside groups that work with students, from the legislature, and from other cities.

"Bell and Book" informs the public about its schools, and it tells each school what other schools are doing. It provides a definite time for the broadcast of information about schools, and it has become known as a spot from which any message will travel far—to people interested in the school subject.

All the news in this broadcast revolves around one central subject. Be-

cause it belongs to that single topic and group, the program is not as form-bound and formal as a general newscast.

The idea for the program now known as "Bell and Book" was conceived by the radio station. We offered the schools broadcasting time in which to present their messages to their own people and to the public. The contributions are sent in by the teachers, students and parents. Since the radio has one person handling this program along with many general newscasts a day, it is not possible for the station to give the personal coverage it would like. It makes the time available to the schools and selects and prepares the news from the material offered.

While news rules are relaxed in many ways for "Bell and Book," they still apply to some extent. The final decision on what will be used, how much of it, and in what form rests with the radio station, which grants as much space to each item as is possible within the limits of the time and the number of contributions.

The station's primary objective was to bring information to the general public. The program is doing that well, as evidenced by the response of the general public and the comments of students. It is doing something else which the station had not expected, but which the administrators foresaw—it is proving a valuable way for the schools themselves to exchange information and communicate with each other.

To launch the program late last fall, WLIP turned first to Supt. Harold R. Maurer of the Kenosha city schools. With his aid the plan was presented to the school principals, department heads, and others in the administrative branch. They in turn carried the message to the teachers. The plan was greeted with enthusiasm.

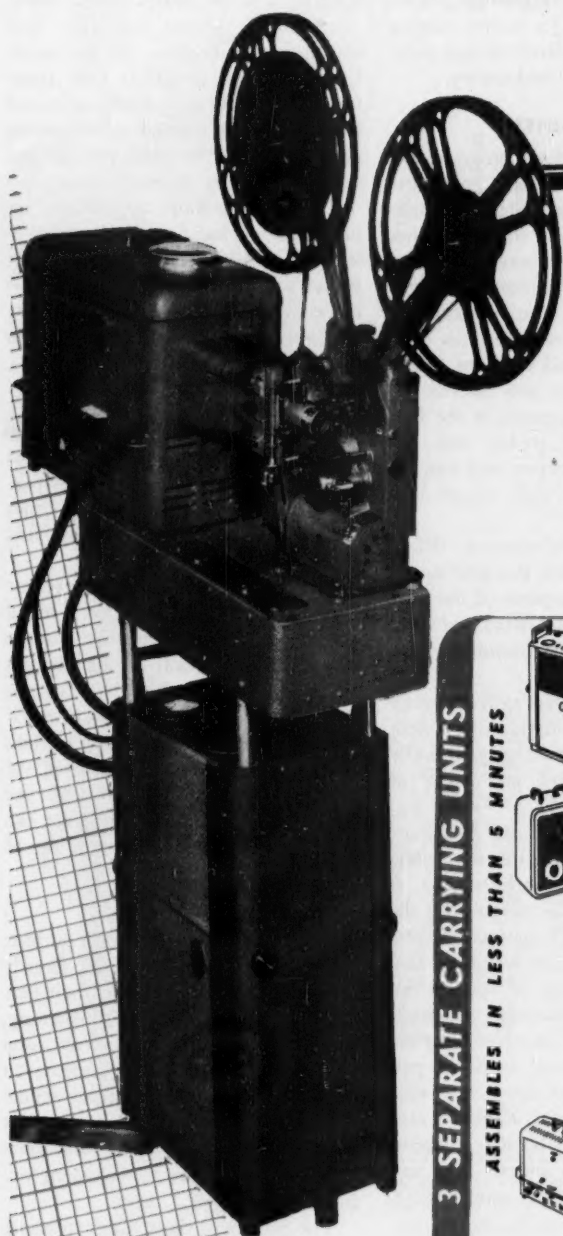
Through the Kenosha county superintendent, Margaret Diehl, WLIP was able to present the plan directly to the assembled county teachers, who also responded enthusiastically. Parochial schools in the city, county and near-by areas were reached in person or by letter. So were the P.T.A.'s of the public schools, and the home and school organizations of the parochial schools. Each is invited to contribute news for the broadcasts.

To help teachers who do not have a "nose for news" and who find difficulty



Plans for the "Bell and Book" program are worked out by the county and city school administrators and the radio station's news editor.

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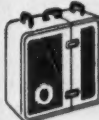
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working out stories, the radio station prepared a long list of possible stories and possible sources for stories. Copies of these lists were placed in each public school in the city and county.

### CONTEST FOR STUDENTS

"Bell and Book" was a program that started life without a name and without a sponsor. It acquired its name after a lively contest in which students from the city and county took part. The prizes to the three winners were \$50 defense bonds. Although only one title was chosen, there were three winners in order to give each age group a chance. One prize was offered for the best entry from pupils in the first through the sixth grades; one for junior high school pupils, and one for students in senior high school and college.

From these three winners, WLIP chose the name it felt was best suited to the needs and purposes of the program. School administrators and civic leaders served on the committee that chose the winners.

The program opens each morning to the sound of a ringing school bell, which is a definite attention-getter. The same bell closes "Bell and Book" at 7:30 a.m.

The radio station's life blood, of course, is its sponsors, the advertisers who support the station financially. It was explained at the outset that the program would have sponsors if possible but that great care would be used in choosing the type of sponsor for such a program. Assurance was given to the schools that no advertising objectionable to a school would be permitted. Sponsorship came very soon after the program was launched, as it proved early to be a popular program, with broad listener appeal. It is now sponsored by two local commercial concerns.

### STUDENT PROGRAM

Because "Bell and Book" presents school news given by regular station announcers and does not have students or teachers taking part directly in the broadcast, it avoids any school board objections to their participation on a commercially sponsored program. The actual student participation is confined to a nonsponsored program, presented at another hour once a week during the school year, with a different group of students appearing each week.

School news is not confined to this "Bell and Book" newscast by any

means. Major school stories also find their place in the hourly general newscasts, as they always did. But "Bell and Book" carries these, too, and usually carries more detail. It finds space for more names and more individual credits than are possible where school news must vie for time with all the other community news of the day.

There is also more opportunity for interpretation and for a more personal style in presentation. The opinions of school administrators may be aired—at a time when the listeners know they will hear about, and are prepared to listen to, that particular subject.

### 7:20 A.M. BROADCAST

WLIP presents this program at 7:20 a.m., the year round. For this station 7:20 a.m. was chosen as the best possible time for such a program. Other stations or communities might find another hour best.

Kenosha's is a so-called daytime station. That means that the Federal Communications Commission permits it to be on the air only during daylight hours. For two months of the year it is as late as 7:15 a.m. before the station can open in the morning. Certain preliminaries must be disposed of immediately, making 7:20 a.m. the earliest time this special program can be put on the air every morning of the year.

### IN RURAL AREAS TOO

It is true that by this hour a number of rural pupils are on buses, already on their way to school. But their parents are still at home and still listening. In fact the number of calls from rural schools asking for announcements on "Bell and Book" of emergency school closings which occur from time to time indicates that even in the rural areas the program catches a great many pupils still at home.

The hour finds most city families up and breakfasting, and this makes it an excellent listening time. If presented any later, "Bell and Book" would miss the greater part of those most interested in what it has to tell them.

"Bell and Book" is a year-round program. Station WLIP feels that its power grows as the listening habit grows and that a break in the program for vacations is weakening, and unnecessary. The first summer's experience proved that there is enough material to keep this newscast going the year round.

The original plan to use extensive accounts of girls' and boys' activities



"Down in Mexico they mine  
almost half of the world's silver."

## Add drama to geography

with a **REVERE** Tape Recorder!

Think of the drama and interest tape recordings add to geography lessons—or any classwork. Costume students in improvised native dress of lands under study. Plan playlets, quiz shows, any number of simple undertakings. Teaching with a Revere becomes fact-filled fun. Interest is ignited. Lessons learned! Even uncooperative and timid pupils grow enthusiastic! Make more use of your school's tape recorder. Too, visit your nearby Revere dealer and see for yourself how easy it is to use the new Revere.

REVERE CAMERA COMPANY • CHICAGO 16, ILLINOIS



### "This is Panama"

And here I have a Panamanian who works in the lumber mills.  
"Man in the street" interviews go over big. Pupils retain what they see and hear! Recordings can be made in private and played later or made in front of the class.

### "I'm a Costa Rican Coffee Bean"

Have pupils dress and act as coffee bean, sugar cane, or other native crop. They recite stories into a Revere recorder for entertaining and instructive discussion.



### So simple to use

A child can operate a Revere. In fact, according to a national survey, even 4th graders often do class recording themselves. Yes, it's easy as playing a radio.

## Revere TAPE RECORDERS

Model T-700—Famous Balanced-Tone fidelity. Automatic keyboard operation. Index counter permits instant location of any part of reel. Full two-hour recording on each 7-inch reel of erasable, reusable tape **\$225.00**

Model TR-800—Same as above with built-in radio, \$277.50

T-100—Standard,  
1-hour play, \$169.50

T-500—Deluxe, 2-hour play,  
built-in radio, \$179.50

TR-200—1-hour play,  
built-in radio, \$224.50



in summer, because they deal with the same students, whether in school or out, was changed somewhat by lack of time. There was so much direct school news that there was not too much room for padding, even in summer.

The vacation news included some school histories; quite a bit of information on the progress of the building program; detailed accounts from school board meetings—often broken into a series of stories run over a period of days.

Many state and national stories dealing with legislative actions pertaining

to schools and to teachers have been used. Information on what schools are doing in other cities has been useful. Summer church school programs have their place. And during the closing weeks of summer there was a flood of material connected with school openings.

Two or three stories a day evolved from the "Hail and Farewell" department which developed in "Bell and Book." This division offered a story of welcome and introduction for each new teacher coming into the city or county system, and a farewell for each

teacher retiring or leaving for other reasons.

The summer recreation program sponsored by the schools, boy scout and girl scout activities, the "Y" programs, the teen-age dances, stories of legislative discussions and decisions all provided material.

How, the station was asked, can "Bell and Book" possibly be kept going over Christmas vacation? That was easy! Advance preparations to have feature and historical material ready proved unnecessary. There was so much material in Christmas programs, plans for the new year, and stories about student and teacher vacation activities that "Bell and Book" time was more than usually crowded during that period.

Christmas presented only a two-week problem, and Easter vacation was a simple matter of one week.

At the end of 10 months of operation "Bell and Book" finds it has only scratched the surface of possibilities in presenting the story of the schools to the public and to each other.

#### MORE CONTRIBUTIONS EXPECTED

As the teachers, students, parents and the public become more and more familiar with the program and their right to share in it, there will be more and more contributions.

One teacher's story on what her students are doing almost invariably brings a number of stories from others on similar subjects or on new projects being tried.

Details of the school board meetings that cannot be carried within the limited space of general newscasts can follow in later stories on the school program.

Not long ago one Kenosha teacher learned through "Bell and Book" of his appointment the night before to a principalship. He heard the glad tidings on his car radio as he traveled 40 miles to summer school. His wife, also a regular listener, heard it at the same time at home.

Of the program she said: "We always listen. We feel 'Bell and Book' belongs to us, and it makes us feel we belong and are a part of things that are going on."

Said the principal of one junior high school, a newcomer to the city: "I never miss the program. I've learned more about the schools and the community through 'Bell and Book' than through any other medium."

(Continued on Page 90)



## The Perfect Classroom Desk!

Rowles

**modernaire**

Series



Modernaire City Desk

Here's a masterpiece in design . . . the MODERNAIRE group. It's one of the most skillfully designed and sturdily built examples of classroom seating that you've seen. The Modernaire brings to the modern classroom, a desk that radiates prize-winning styling . . . softly whispers deep relaxing comfort . . . invitingly encourages good posture control . . . The Modernaire is a desk of unusual structural strength and unmatched durability. It's an exceptional combination of functional beauty and superb construction . . . a combination that makes it your best buy anywhere. Get the full details on the Modernaire today.



Modernaire Tablet Arm Chair



Modernaire Chair



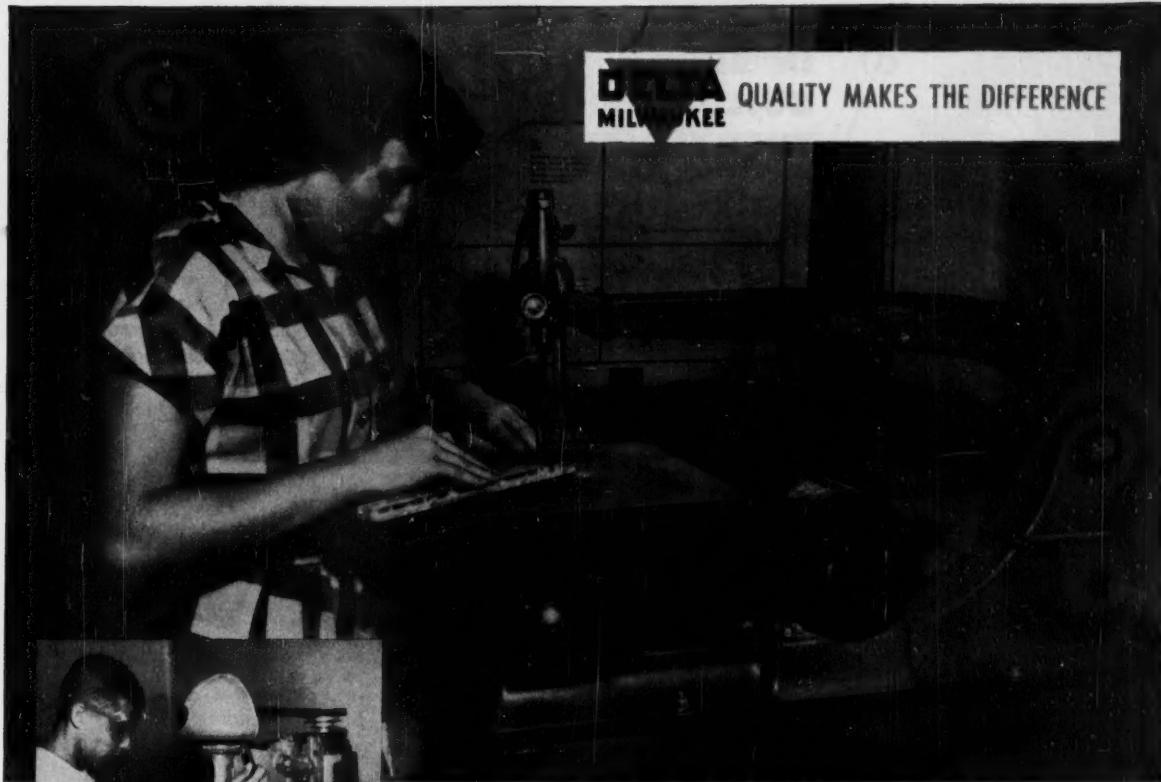
For complete information on the new Modernaire Series Desks, see your local Rowles School Equipment Dealer, or write to E. W. A. Rowles Company, Arlington Heights, Ill.

**E. W. A. ROWLES COMPANY ARLINGTON HEIGHTS, ILLINOIS**

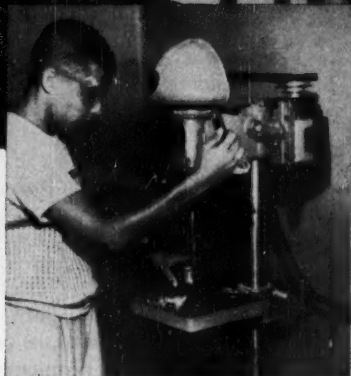


**DELTA**  
MILWAUKEE

QUALITY MAKES THE DIFFERENCE



Here a student demonstrates how easy it is to "do the job" with a Delta



The Delta Drill Press has more than demonstrated its worth in Shortridge plastics classes

## Girls keep up with boys in my shop classes because **DELTA TOOLS** ARE SO EASY TO OPERATE...

— says Mr. Gordon Johnson, Industrial Arts Instructor,  
Shortridge High School, Indianapolis, Indiana

Shortridge High School has gained an enviable reputation with its shop work in plastics, and Mr. Johnson gives a large share of the credit to the Delta Power Tools with which his shop is equipped. Items made by Shortridge students won "First" and "Second" and four honorable mentions in the Plasticraft division of the National Industrial Arts competition, sponsored by the Ford Motor Co.—and have been on display at the Museum of Science and Industry in Chicago.

Only about three years ago, hardly a student at Shortridge knew of Plasticraft. Aggressive Mr. Johnson started the ball rolling with a \$25.00 investment in plastics, and a Delta Scroll Saw installed in the industrial arts shop. As interest in Plasticraft grew from one class, to eight periods of instruction, a Delta Lathe and a Delta Drill Press were added.

"A great many people don't realize it," stated Mr. Johnson, "but girls are just as keen about shop-work as are boys. Because Delta Tools are so easy to operate, the girls step right up and saw, bore and turn to keep right up with the boys."

Whether your classes are in plastics, woodworking or metal working, you, too, will find that for ease of operation, built-in accuracy, safety and quality construction, Delta tools are your best investment. Ask your Delta dealer for complete information today.

**DELTA QUALITY POWER TOOLS**  
Another Product by **Rockwell**



DELTA POWER TOOL DIVISION, ROCKWELL MANUFACTURING CO.,  
4061 North Lexington Avenue—Pittsburgh 8, Pennsylvania.

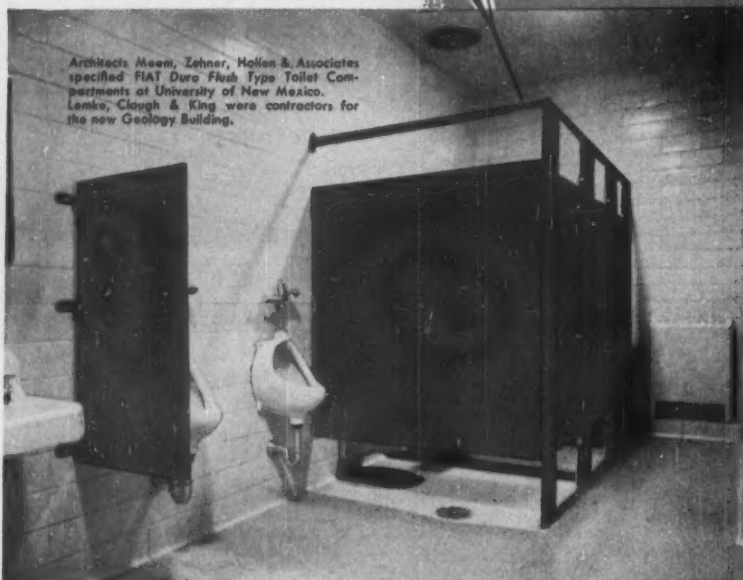
- ☐ Send me the name of the nearest Delta dealer.  
☐ Send me the "Power Tool Instructor" regularly.

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Position \_\_\_\_\_  
School \_\_\_\_\_  
Address \_\_\_\_\_  
City \_\_\_\_\_ Zone \_\_\_\_\_ State \_\_\_\_\_

Read this helpful, interesting magazine published for school shops—the

**POWER TOOL INSTRUCTOR**

Four times a year *Free on Request!*



Architects: Maen, Zehner, Hotten & Associates specified FIAT Dura Flush Type Toilet Compartments at University of New Mexico. Lemke, Clough & King were contractors for the new Geology Building.

When you specify  
**FIAT**  
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The rugged construction of FIAT compartments and urinal screens, their durable finishes and easy-to-clean surfaces are important considerations in school and college installations. Exclusive features are incorporated in: (1) pilaster construction, the front and two edges being one piece of steel, making a smooth design, (2) theft-proof screws and (3) concealed type fastenings on all chrome-plated hardware parts. Panels, pilasters and doors are made of two sheets of heavy gauge stretcher leveled steel with fiber board sound deadener core cemented to the metal and interlocked under tension. Available in a selection of colors, all FIAT finishes are baked-on in two separate coats after the application of a rust-resistant prime coat. There is a FIAT representative in your area.

Send for Complete Illustrated Catalog and address of your nearest FIAT representative.



**FIAT METAL MANUFACTURING COMPANY**  
THREE COMPLETE PLANTS - ECONOMY • CONVENIENCE • SERVICE

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Franklin Park, Ill.  
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Los Angeles 63  
California

In Canada: Percolite and Metal Products, Ltd., Orillia, Ontario

(Continued From Page 88)

A university extension director, commenting that he invariably has "Bell and Book" with his breakfast in the morning, did not realize for quite awhile that he could use it as well as enjoy it. Now he sees, in what others are doing, that he, too, has a big opportunity to reach the public with information about the university extension center—what can be studied there and who is entitled to enroll. He is now supplying such information regularly and reaching a large group that had not realized how close, and how economical, a college education can be.

Immediate and vocal reaction to any error on the program indicates intense listening interest. This is radio's surest test of listener concern.

#### SERVES NEED

Harold R. Maurer, superintendent of Kenosha schools, has this to say about the new program:

"The 'Bell and Book' broadcasts have been expertly designed to serve a need of long standing within the school system and for the people comprising our school community. A school system simply cannot hope for attainments which in any way surpass the ideals, the understandings, and the appreciations of the general public which is required to foot the bill. In other words, the schools are the cultural fruit of a community and as such are likely to be as good or bad as the people want them to be or permit them to be—no better and certainly no worse. There is abundant evidence that these broadcasts have been well received in Kenosha. We have found that the school staff is not only willing but eager to furnish the material required. The broadcasts, in my considered judgment, have enabled the general public better to understand and appreciate the character and scope of the school program.

"I would have no hesitancy in urging school administrators elsewhere to explore the possibilities of this pattern of educational broadcasting with their local radio stations."

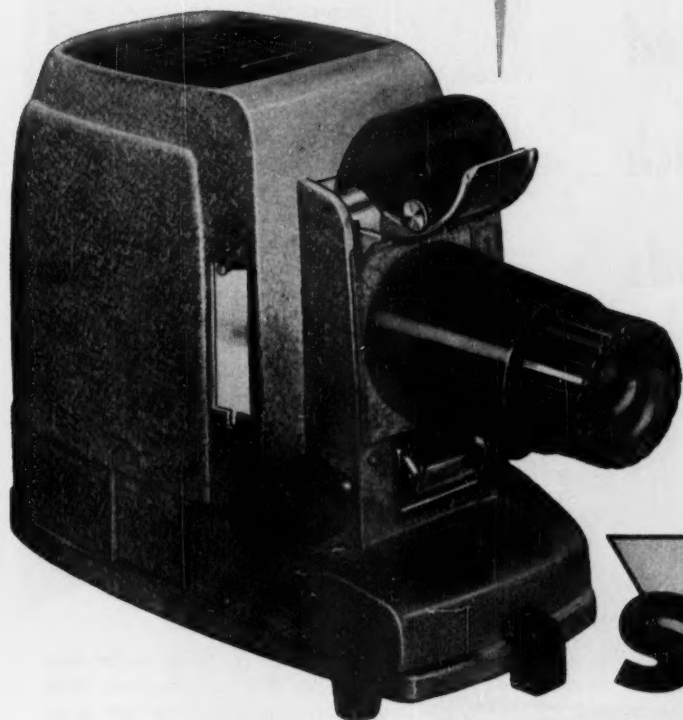
Each contribution from the schools helps to bring the school and the public closer together and to improve the public understanding of its educational system. There is a closeness and intimacy in this approach, and an informality that reaches the average citizen as no learned treatise on education can ever do.

*Versatility*

...at low cost!

## SVE SCHOOL MASTER

### 300 watt dual-purpose projector



Offering every important feature found in more costly projectors, plus SVE "exclusives" that assure brilliant filmstrip presentations, the School Master occupies a unique place in the Dual-Purpose Projector field. When equipped with the slide carrier of your choice (available as accessory), the School Master provides quick interchange—from filmstrips to 2 x 2 slides in 18 seconds! Ask your SVE Audio-Visual Dealer for a demonstration and further information about this versatile, low-cost teaching tool. **\$64<sup>50</sup>**

Completely coated optics, f/3.5 anastigmat color-corrected lens for sharp, brilliant pictures. "Honeycomb" blower cooling system; outer lamphouse never exceeds room temperature.

To help you plan your programs...

**FREE!**

SVE EDUCATIONAL CATALOG  
SVE PROTESTANT RELIGIOUS CATALOG

Complete listings of SVE filmstrips, slides, slidesets and audio-visual equipment. A free service to every user of audio-visual material. Send for your personal copy now. Please specify which edition you desire.



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## THE SCHOOL LUNCH

**Minneapolis schools**

**like their**

**Staggered**

**Lunch**

**Periods**

**ELIZABETH GOODMAN**

Director of School Lunchrooms  
Minneapolis Public Schools



**D**URING the last year the Minneapolis public schools have been attempting to overcome a problem which is inherent in most large school lunchrooms—namely, spasmodic overcrowding early in the lunch period and an empty lunchroom a short time later.

There is a mad rush to be first in line and to be first to that coveted spot in the dining room. Long lines of hungry youngsters soon form. There are crowding and confusion and an actual slowing of service. In fact, a child often prefers to carry a bag lunch from home rather than wait in line for the planned plate lunch of the day.

A good lunch service should offer some new and varied foods within the pattern of the menu from time to time. Because children's tastes do vary it is desirable to allow a choice between two or more lunch offerings, especially with older children. This type of experience in food selection is impossible with the overcrowding I have been describing.

The atmosphere generated by overcrowded conditions interferes with the development of the most worthwhile aspects of school feeding. There can be little educational value in such a lunch-hour experience. Our educational administrators have told us there are not enough hours in the school day to teach children everything they ought to know. In that case we should make the lunch hour rich in educational experiences.

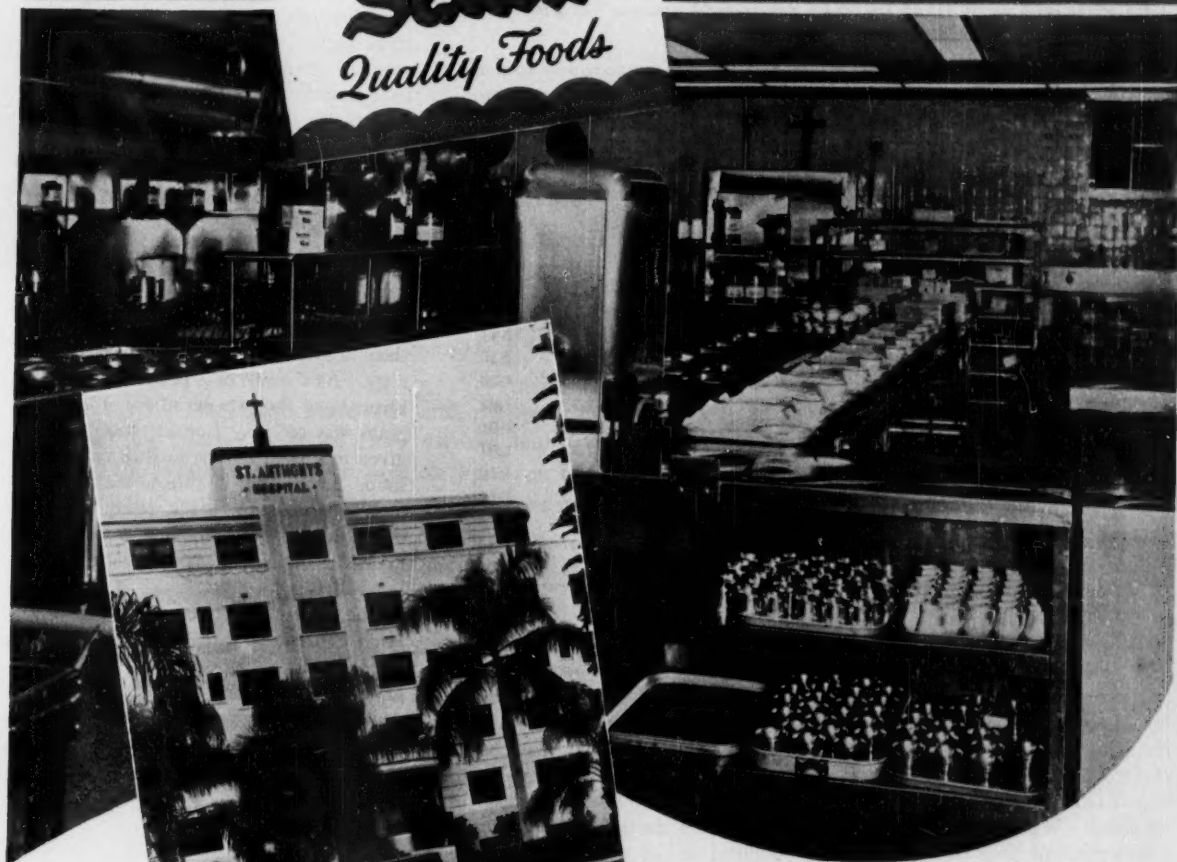
### **WHAT CAN BE DONE?**

The question is: What can be done to improve this bad situation? Most lunchrooms cannot enlarge their space nor can the length of time devoted to the noon lunch be extended. But is the total lunch time being used consistently and wisely?

In Minneapolis we became aware of the inconsistency of having two or three peak serving periods with an empty lunchroom in between. It seemed logical that we should equalize the use of time and facilities and distribute our service more evenly between 11:30 a.m. and 1 p.m. We started talking to principals about the desirability of sending small groups

The even flow of students to the lunchroom creates a leisurely use of facilities. Boys and girls have time to select the food they want, and there is no rush for special tables.

# Sexton Quality Foods



ST. ANTHONY'S HOSPITAL  
St. Petersburg, Florida

**I**t must be good

That Sherman Blend coffee has been granted the Good Housekeeping Seal of Approval is evidence of merit. But the fact that over three-quarters of a million cups are served every day in the year, in the leading hospitals, hotels, restaurants, steamship lines, camps and clubs, is the best evidence of the popular acceptance that this coffee has come to enjoy. It is a tribute in tonnage to the smooth flavor and rich body of this exquisite guest coffee. Try it and see!

JOHN SEXTON & CO., CHICAGO, 1953

## Schedule for Entering and Leaving the Lunchroom

Students scheduled for lunch at 11:30 are to go directly to the lunchroom from their third period classes as in past years. All other students are to report to their fourth period class and leave as scheduled below. Teachers and students are asked to follow the schedule carefully; any variation can upset the plan. Clocks have been installed in the students' lunchroom. There will be no bells except at the beginning and the end of the lunch period (11:30 a.m. and 1 p.m. or 11:50 a.m. and 1:20 p.m.). Each student is responsible for his prompt return to class.

REGULAR SCHEDULE		ROOMS ENTERING NORTH	ROOMS ENTERING SOUTH	AUDITORIUM SCHEDULE	
LEAVE ROOM	RETURN TO ROOM			LEAVE ROOM	RETURN TO ROOM
11:30	12:00	313-121-118.....	160-129-157.....	11:50	12:20
11:40	12:10	217.....	226.....	12:00	12:30
11:42	12:12	122-318.....	229.....	12:02	12:32
11:45	12:15	204.....	206.....	12:05	12:35
11:47	12:17	113.....	331.....	12:07	12:37
11:50	12:20	222.....	324.....	12:10	12:40
11:52	12:22	319.....	323.....	12:12	12:42
11:55	12:25	336.....	302.....	12:15	12:45
11:57	12:27	309.....	110.....	12:17	12:47
12:00	12:30	310.....	225.....	12:20	12:50
12:10	12:40	208.....	304.....	12:30	1:00
12:12	12:42	301.....	207.....	12:32	1:02
12:15	12:45	209.....	213.....	12:35	1:05
12:17	12:47	103.....	303.....	12:37	1:07
12:20	12:50	306.....	124.....	12:40	1:10
12:22	12:52	307.....	322.....	12:42	1:12
12:25	12:55	115.....	126.....	12:45	1:15
12:27	1:00	.....	328.....	12:47	1:20
12:30	1:00	Girls' Gym, Choir...	Boys' Gym, Staff Technic	12:50	1:20

in a steady flow to the lunchroom. From the standpoint of better lunch operation it looked good, but from the administrator's point of view the obstacles looked pretty big. How could classes be scheduled to permit groups to go to the lunchroom every five or 10 minutes? Would teachers object to interruption of their class hour? How about confusion in the halls with groups passing back and forth to the lunchroom continuously?

### SERVICE IMPROVED

The Theodore Roosevelt High School pioneered in Minneapolis in setting up a schedule of classes and noon lunch periods that would permit a gradual and even flow of students to the lunchroom every three or five minutes. The assistant principal worked diligently to perfect a schedule that would run smoothly and meet the needs of all groups. Certain classes, such as shop, home economics, gymnasium and instrumental music, were left unbroken and were scheduled for either the beginning or end of the noon period. The class schedule followed appears on this page.

The reactions to the new program were favorable from the beginning. Students quickly learned it was not necessary to break all speed records to the lunchroom. Whenever they

arrived the lines were short and service was rapid. Seating space in the dining room was plentiful. Students could visit with classmates before it was time to return to class. Each student was responsible for returning to his class at the end of his allotted time. There were no bells, but clocks were installed so all could see and check the time.

At Roosevelt High School the student council assumed the responsibility for conduct of students in the halls and dining room. Council members were briefed on the new program and gave excellent assistance in smoothing out rough spots.

Teachers also liked the plan. They found that reduction in crowding applied in their lunchroom too. Any teacher who felt that the particular nature of her class did not lend itself to a divided period was scheduled for an unbroken class period at the beginning or end of the noon hour schedule.

### OTHER SCHOOLS INTERESTED

The new scheme was looked upon with much interest by groups in other schools. A regular meeting of Minneapolis secondary school principals was held at Roosevelt so that they might become acquainted with the program and how it was working. Groups of students and teachers from other high

schools came to visit and took back reports to their schools. Soon schedules of a similar nature were being tried out in other schools.

The Minneapolis Vocational High School is using a system of staggered lunch periods and likes it. The principal suggests that success comes when various groups of school employes have studied the program and express a desire to try it out.

Some of the teachers from Vocational High made visits to see a staggered program in operation. A student council discussion of lunchroom problems indicated that council members considered waiting in line a major difficulty in noon lunch service. They discussed the new plan with their homerooms and voted to give it a try. As a result of a general interest throughout the whole school a program was set up. Consideration was given to special classes, such as various shop, foods and clothing, and cosmetology classes. Large study halls of several hundred students were not divided to avoid the necessity of taking roll twice.

The general reaction at Vocational High is that the program is a great improvement. Supervising teachers say it has made their work easier, students like it, and records show that the percentage of students who buy plate lunches has increased by 1 per cent a month since the new program was initiated.

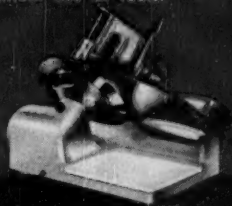
### EXPERIMENT SUCCEEDS

Last spring at Edison High School the staggered lunch period plan was tried out on an experimental basis. This school felt that it was the best program developed so far and has adopted it again this fall. Classes are arranged so that students go to the lunchroom at 15 minute intervals. This is similar to the plan followed at Vocational.

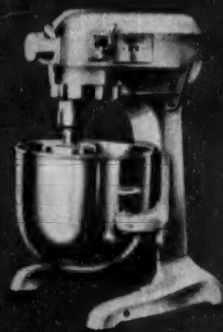
The idea of shorter and more frequent lunch periods is becoming increasingly popular. Many other schools have it under consideration this current school year, and the program will grow. The advantages in reduction of crowding and congestion are apparent. There is increasing recognition that the program can contribute to the physical, mental and emotional well-being of children. The idea of staggered lunch periods is not theoretical in Minneapolis any more. It has been tried and carried out successfully in the schools here.



**THREE STYLES—ONE STANDARD.** There are 3 Hobart slicers, with manual feed, automatic pressure feed and angle feed. All feature Hobart Stay-sharp solid stainless concave knife and Hobart advanced safety features. Design is completely free of holes, cracks and crevices where food or juices can lodge—allows instant cleaning without use of tools.

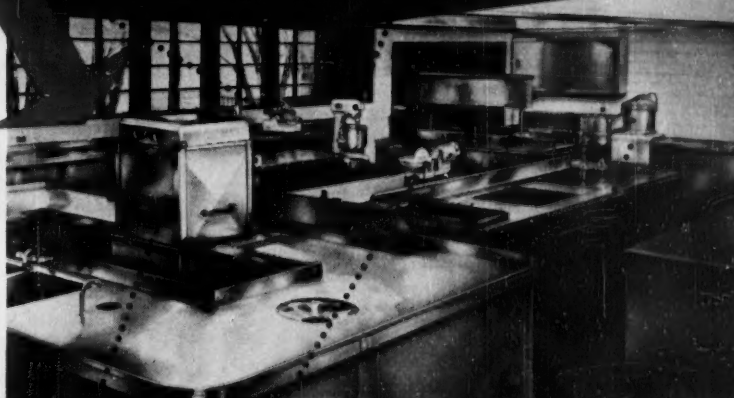


**MATCH CAPACITY TO VOLUME.** Because there's waste in both under-capacity and over-power, Hobart gives you choice of 9 mixers ranging from the bench-type 5 qt. model to the heavy-duty 140 qt. Model V-1400. All feature Hobart Planetary Action, Plus-Power and Positive Speeds. Full range of attachments to perform work of auxiliary equipment.



## Inside story of a Kitchen Planned for Performance

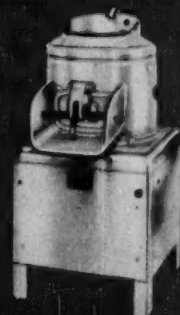
Perfect layout for higher standards and efficient handling! Careful selection of food, kitchen and dishwashing machines in proper sizes for optimum efficiency through exact balancing of volume and capacity! Typical of all-Hobart installations, here's maximum efficiency of output, highest standards, and *lower cost per serving*. Here's the inside story of every successful operation—and results like this come in all machine sizes. Including yours!



**TAKE YOUR CHOICE!** Hobart Dishwashers and Glasswashers come in 25 models—fully and semi-automatic—with and without Hobart Time Controls—little (2 ft. square) and big (29 ft. flight-type continuous racking). They're all Hobart designed and made—and there's one or more just right for you.



**ALL-ROUND EFFICIENCY IN 2 SIZES.** Food utilization is greatly improved by using Hobart Food Cutters to prepare large quantities of ingredients in a matter of seconds—and to make use of ends and left-overs as well. For efficient preparation of all types of food in kitchen and salad pantry, choose Model B4141 with  $\frac{1}{2}$  H.P. motor (illustrated) or Model T-215-GA ( $\frac{3}{4}$  H.P.) with or without pedestal.



**NAME YOUR VEGETABLE VOLUME—** choose your peeler. Four models in bench, pedestal and cabinet styles—with capacities of 15 through 33 lbs. meet all sanitary requirements and are Hobart-built to stand up under the most severe service. They peel all shapes and sizes—peel them only skin deep, no flats.



Trademark of Quality for over 55 years

Along with wide choice of models, an all-Hobart installation gives you three more unique advantages: (1) Hobart engineering and proved performance, backed by a guarantee outstanding in the industry for over 55 years; (2) consolidated planning, purchasing and service—as near you as your phone; (3) interchangeability of attachments and accessories. For more complete information, get in touch with our local representation—or our Troy, Ohio, offices, today . . . **The Hobart Manufacturing Company, Troy, Ohio.**

# Hobart Food Machines

*The World's Largest Manufacturer of  
Food, Kitchen and Dishwashing Machines*

## MAINTENANCE AND OPERATION

### Employing Women for Custodial Work

**RALPH L. MULLER**

Assistant Superintendent in Charge of Business Administration  
Public Schools, Gary, Ind.



Left: A woman custodian scrubs a sink in a wash-room at the Lew Wallace School. Below: Another woman washes a window in the same school.



THE desirability of the employment of women as custodians is not questioned in the schools at Gary, Ind., for women custodial employes have become an integral and important part of our organization. Women were first employed as janitresses in the Gary schools in approximately 1910, when Gary was first blossoming forth as a city in the midst of the Lake Michigan sand dunes. The continual employment of women custodial employes has kept pace with the rapid growth of the city with the result that the schools now employ women to fill the equivalent of 66 full-time jobs as compared with 91 men who are employed in full-time custodial jobs. Approximately one-third of the women are full-time employes, with the remainder working three to six hours per day as required in the several school centers.

The employment of women as custodial employes is considered desirable for many reasons. In the first place, it has been observed that women do a good job of cleaning more naturally than does the average man. Cleaning floors, lavatories, washing windows, or dusting are a regular part of a woman's work at home, and women readily adapt themselves to the school cleaning problems.

The employment of women also gives an element of flexibility in providing service to meet the varying demands of a school day. In most schools the greatest demand for cleaning service occurs during the hours immediately following the dismissal of school. Women employed on a four or five hour basis can readily meet this demand, for, while it is virtually impossible to employ men for four hours per day, there are many women who want part-time employment.

The employment of women also provides for some economy because the prevailing wage rate for the service provided by women is somewhat less than if these same services were provided by men. While in Gary the plan of assignments does not provide an actual dollar saving, it appears that it actually results in better service per dollar expended. Also, with the great demand for labor that has existed dur-



*For greater safety,  
handling ease, and adaptability...*

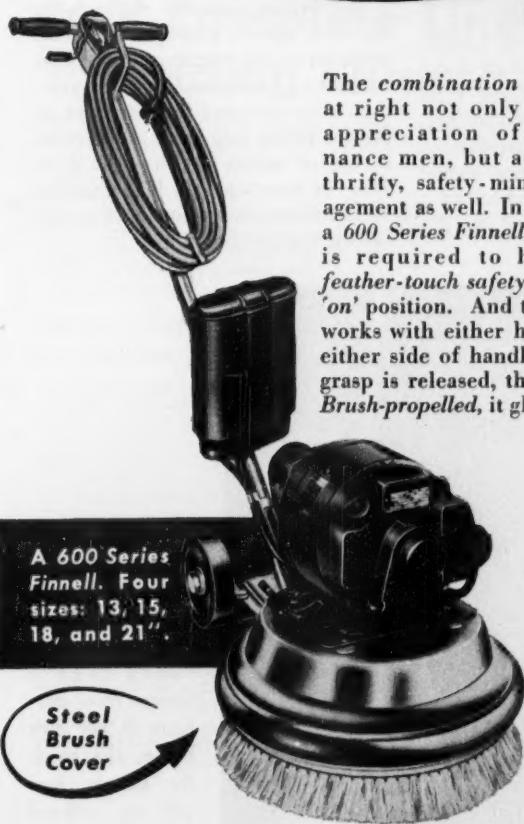
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The combination of extras at right not only wins the appreciation of maintenance men, but appeals to thrifty, safety-minded management as well. In operating a 600 Series Finnell, no effort is required to hold the feather-touch safety switch to 'on' position. And the switch works with either hand from either side of handle! When grasp is released, the switch automatically disengages and the machine stops. **Brush-propelled**, it glides over the floor with virtually effortless guidance. True

balance is attained through proper distribution of weight per square inch of brush surface in relation to thrust and brush speed. Indicative of the quality construction of a 600 Series Finnell are: G. E. Drip-Proof Capacitor Motor (furnishes abundant power) . . . worm gear of special phosphorus gear bronze, meshing with worm of hardened, ground, and polished gear steel . . . New Departure Ball Bearings. Although essentially a polisher-scrubber, with suitable accessories the machine can also be used to apply wax, dry-scrub, steel-wool, sand, and grind.

Another of the extras offered by Finnell is nation-wide service! There's a Finnell Floor Specialist and Engineer near you to help solve your particular problems . . . to train your operators in the proper use of Finnell Equipment . . . and to make periodic check-ups. It's also good to know that Finnell makes everything for floor care! For demonstration, consultation, or literature, phone or write nearest Finnell Branch or Finnell System, Inc., 211 East St., Elkhart, Ind. Branch Offices in all principal cities of the United States and Canada.



A 600 Series Finnell. Four sizes: 13, 15, 18, and 21".

**Steel  
Brush  
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# **FINNELL SYSTEM, INC.**

*Originators of Power Scrubbing and Polishing Machines*



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PRINCIPAL  
CITIES





Scrubbing the washroom walls is one of the jobs that is allotted to women custodians in the Gary public schools.

ing recent years, capable women have been more readily available than qualified male employees.

Women classified as janitresses are normally assigned all of the regular cleaning duties, including mopping and wall washing. A woman is paid approximately 75 per cent of the wage paid a male janitor, and, when we calculate the personnel assignments for a building, are rated as the equivalent of three-fourths of one man. This means that those responsible for building assignments may have a choice of eight hours of janitress service as compared with six hours of janitor serv-

ice. All of the schools in the city having two or more employees have both male and female employees and, as is naturally expected, the male employees perform all of the heavier tasks about the building, including boiler operation, yard care, snow shoveling, and repair services.

Women are employed on a year-round basis and are accorded all of the fringe benefits enjoyed by the men, including paid vacation, holiday pay, pension and sick benefit provisions.

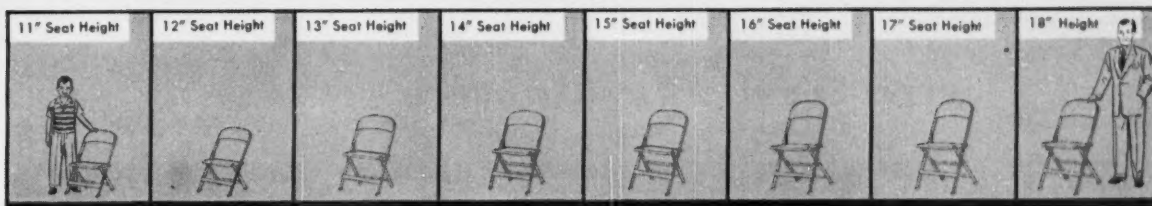
It has been said that one should never underestimate the power of a woman, and it has been found that this

applies in school custodial service as elsewhere. During the war years, when male help was difficult to obtain, women were employed for staff positions normally filled by men, including the positions requiring the operation of a steam boiler. As a result, two women occupy the positions of head custodian and assistant head custodian in a school housing 2600 pupils and have charge of a staff of 13 custodial employes, including four men who operate the boilers and perform other services about the building. One woman serves as custodian of a five-room school, carrying full responsibility for all services, including operation of the boiler. While one would not recommend the employment of women for such positions as a common practice, it must, nevertheless, be said that in each of these situations, the women have served with such competency and efficiency that it was not considered necessary to replace them when manpower became more readily available.

The women custodial employes in the Gary schools have proved themselves dependable, stable employes who are efficient, competent and cooperative. They command the respect of all persons whom they serve and provide a type of service which is of great value in maintaining a high standard of cleanliness and sanitation throughout the Gary schools.



Since mopping floors and other such housekeeping chores are tasks that a woman must perform in her own home, she readily adapts herself to school cleaning problems. For many men, however, careful and thorough cleaning appears difficult.



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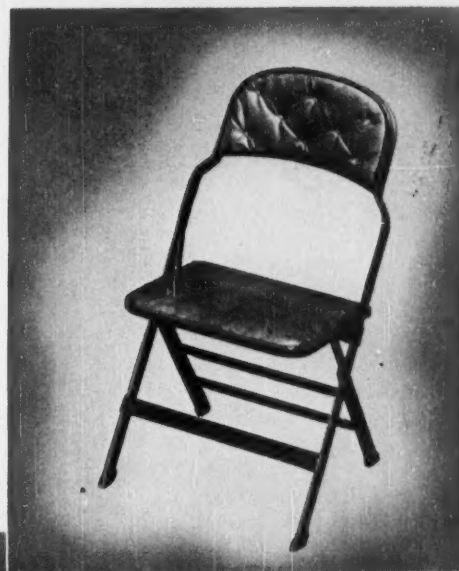
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School \_\_\_\_\_  
Address \_\_\_\_\_



## wire from **Washington**

### **Qualified O.K. on UNESCO**

► The fourth national conference of the U.S. National Commission for UNESCO, meeting in Minneapolis in September, received an appraisal of UNESCO's work from three U.S. delegates to the special session of the UNESCO general conference held in Paris this past summer. Defending the purposes and long-range goals of UNESCO, the delegates still examined critically some of the rough spots in the program.

The chairman of this delegation was Irving Salomon, retired businessman and philanthropist from California. The other members were Elizabeth Heffelfinger, civic leader and Republican national committeewoman from Minnesota, and President John A. Perkins of the University of Delaware.

The Salomon report endeavored to clear up some misconceptions. For example, the report found no evidence that UNESCO was producing material or textbooks to indoctrinate American children with un-American ideas. Such classroom material as was produced was primarily for use in fundamental education centers in Mexico and Egypt. Speaking of two pamphlets which had been attacked by certain organizations in the United States as promoting world government, the Salomon report said: "We can readily understand where the term 'world citizenship' can be misinterpreted and misunderstood by American groups, especially those that might be more or less isolationist, because these pamphlets strongly espouse the cause of U.N., world-mindedness, and international understanding and sympathy. Some such groups have extracted statements from the pamphlets which might appear on the surface as favoring world government, but a critical analysis of the contents proves otherwise."

The report also includes statements to refute the assertions that UNESCO is

anti-religious or that the United States contributes too much and benefits too little from UNESCO. In this last connection, it stated: "Our participation [in UNESCO] is a necessary evidence of our good faith and our belief in the liberal and democratic conceptions that underlie the free world's struggle against authoritarianism and dictatorship. Help to others in strengthening the foundations of democratic free governments by raising educational standards is in the interest of promoting peace, strengthens the economic stability of the world, and therefore promotes world prosperity, on which most of our own prosperity depends."

Among the major weaknesses of UNESCO listed in the report were: (1) that its program attempted to cover too many activities, (2) that some of the specialists were not truly qualified for their job, (3) that the executive board of UNESCO seemed to represent individuals rather than member governments, thereby resulting in inefficient leadership, and (4) that there had been little effort within the member states to promote understanding of UNESCO's aims. Many of these criticisms were echoed by representatives from other countries that are members of UNESCO.

### **U.M.T. a possibility**

► The newly reconstituted National Security Training Commission has been asked to report by December 1 on the feasibility of universal military training.

Although President Dwight D. Eisenhower previously indicated opposition to trying to operate Selective Service and U.M.T. side by side, this latest request may be the first step toward an Administration proposal that Selective Service be shelved and U.M.T. put into operation. Of significance is the fact that the Office of Defense Mobilization has also been asked

to report December 1 on the national manpower situation.

Three new members were added to the National Security Training Commission this summer. They are Karl T. Compton, former president of the Massachusetts Institute of Technology, Julius Ochs Adler, publisher of the *New York Times*, and Warren Atherton, former national commander of the American Legion. The other two members were on the original N.S.T.C.: Adm. Thomas C. Kinkaid (ret.) and Lt. Gen. Raymond S. McLain (ret.). There is little doubt that the commission will come out strongly in favor of prompt adoption of a U.M.T. plan in lieu of Selective Service, especially in view of the Korean truce.

Meanwhile, Selective Service will continue with its testing program to determine which college students deserve deferments. New series of tests will be given at more than 900 testing centers on November 19 and April 22. This announcement spikes the rumor, current last summer, that the use of the tests would be extended to high school seniors and that the scoring requirements would be raised. The tests will be open only to college-level students. Approximately 483,000 students have been tested to date. About 162,000 have been deferred on the basis of class standing or the Selective Service Qualification Test. College undergraduates must make a score of 70 or better; graduate students a score of 75 or better. Draft boards do not have to defer a student on the basis of the test, but it does provide an objective criterion for reference.

### **Against vocational aid**

► Last spring, the House committee on appropriations tried without success to reduce by 25 per cent federal appropriations for vocational education under the George-Barden Act. This move was defeated on the floor



A black and white photograph of several Sylvania fluorescent lamps and their packaging. The lamps are arranged diagonally across the frame. The packaging is a cardboard box with the Sylvania logo and the word 'SYLVANIA' printed on it. The background is a light-colored, textured surface.

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## wire from Washington

of the House, one argument against it being that state legislatures would not have time to make up the deficiency in funds for vocational education at the state level.

Now, a fresh impetus has been given to the suggestion that the federal government step out of vocational education entirely. In a staff memorandum the Council of State Governments, a research organization, recommended to the conference of state governors in its summer meeting that federal grants

for vocational education cease as of June 30, 1955. The memorandum asserted that states and localities provide 80 per cent of the funds expended on vocational education and questioned whether federal funds were still needed to stimulate and assist the states in this field of education.

Any move to put an end to the almost 40 year old federal vocational program will arouse strong opposition from southern members of Congress headed by Sen. Walter George (D-

Ga.) and Rep. Graham A. Barden (D-N.C.), co-authors of the latest federal legislation in the field and powerful figures in their respective chambers.

Elimination of federal vocational education grants-in-aid will be supported primarily by representatives and senators from the northeastern states, to a lesser extent by congressmen from the Midwest. A strong feeling of resentment against grant-in-aid programs that benefit the southern states is sometimes expressed by members of Congress from wealthy states in which the federal contribution is but a small part of the total expenditure of funds for vocational education.

A further counter to any proposal to eliminate federal vocational grants will be found in the well organized opposition of the vocational instructors. The strength of the vocational program lies in the rural areas, where vocational homemaking and agriculture courses dominate, and few members of Congress can yet afford to come out openly for eliminating federal aid to programs that reach so directly into local communities.

### Shaping things to come

► Just before returning from his Colorado vacation, President Eisenhower appointed the remaining 14 of the 25 members of the U.S. Commission on Intergovernmental Relations, headed by Clarence E. Manion, former Notre Dame University Law School dean. Faced with a March 1 deadline, the commission will have to move quickly to have significant recommendations ready in time. In all likelihood the commission will turn to the Council of State Governments for much of its professional staff assistance as did the task force on federal-state relations of the Hoover Commission in 1949.

The presence of six state governors or former governors on the commission is a matter of some concern to proponents of federal grants-in-aid for health, education and highway and airport construction. They are apprehensive of a "states' rights" drive to eliminate grants-in-aid or to cut off direct federal-local programs.

Serving on the commission are Governors John Battle of Virginia, Alfred Driscoll of New Jersey, Allan Shivers

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## wire from Washington

of Texas, and Dan Thornton of Colorado. Former Governors Sam Houston Jones of Louisiana and Val Peterson of Nebraska were also appointed to the commission, the latter in his capacity as federal civil defense administrator.

In addition to Mr. Peterson, the President appointed two other members from the federal government, Secretary of Health, Education and Welfare Oveta Culp Hobby, whose department administers extensive grant-

in-aid programs, and Under Secretary of the Treasury Marion B. Folsom, who, while treasurer of the Eastman Kodak Company, directed studies in economic policy for the Committee on Economic Development.

Former Governor Jones of Louisiana is one of eight public members appointed to the commission. Two of these eight were also on the Hoover Commission task force on federal-state relations. They are John E. Burton, vice president of Cornell Univer-

sity, and William Anderson, professor of political science in the University of Minnesota.

Conspicuously absent from the commission is a representative from state education agencies which channel federal grants-in-aid for vocational education to local schools. This is a matter of concern to organizations such as the American Vocational Association, the National Council of Chief State School Officers, and the National Education Association, which remember all too well the treatment accorded to education by the Hoover Commission on Reorganization of the Executive Branch of the Government when it rejected the recommendation of its task force for an independent federal education agency. Because the Intergovernmental Relations Commission will be expected to form major policy for the present Administration, its attitude toward the educational needs of the states and the educational responsibility, if any, of the federal government will probably be closely scrutinized in the months to come.

### For security reasons

► After several higher education institutions had protested language in new contracts between the universities and the U.S. Armed Forces Institute which appeared to give the federal government too much say in selection of faculty for correspondence courses, the Department of Defense offered to amend the contract. John A. Hannah, assistant secretary of defense, on leave from the presidency of Michigan State College, stated on September 16 that he did not think that the clause as modified was now a threat to institutional control of academic qualification of faculty members.

As modified, the clause in the contract now reads: "The contractor will not employ or retain for the performance of services under this contract such persons as are, *for security reasons*, disapproved by the government." (The italics indicate the changes in wording.) A spokesman for the American Council on Education pointed out that the council had hoped for something different, but that the wording adopted now by the Department of Defense is much more acceptable to the institutions involved since it confines the area of government disapproval to the security issue.

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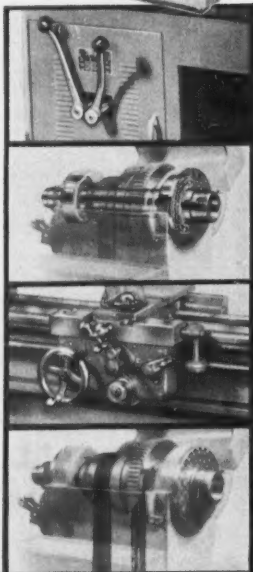
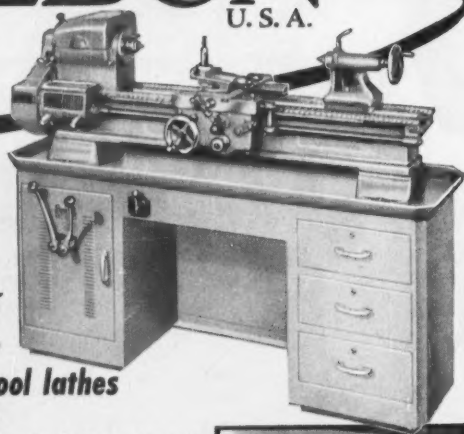
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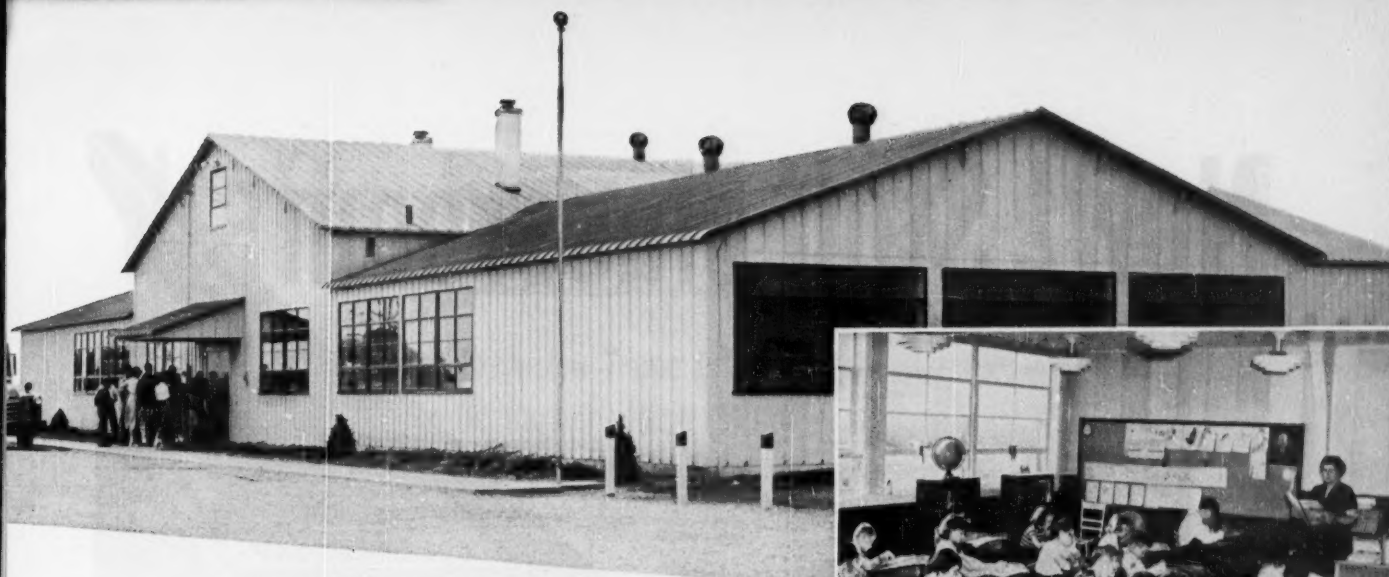
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Both pupils and teachers are proud to claim this attractive Butler building as their school. Notice the banks of windows that let in lots of fresh air, and flood the modern classrooms with light.



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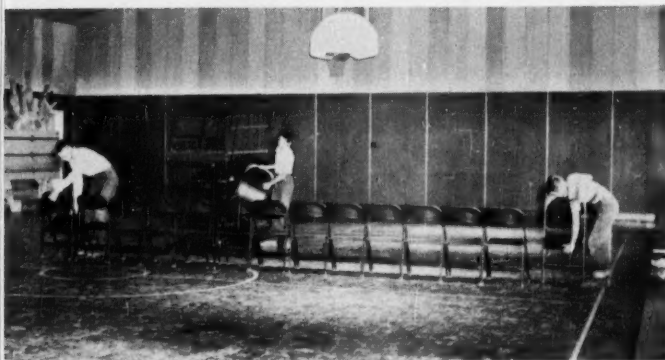
A dream comes true for Mr. Totel as he points out to Mr. Stakemiller and Mr. Phalen of the Mendota Building Service, how well their plans have worked out in practice.

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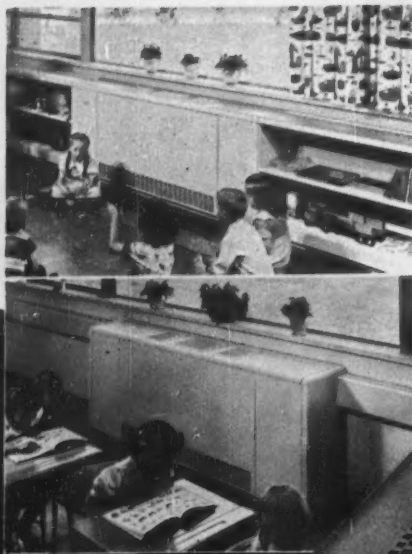
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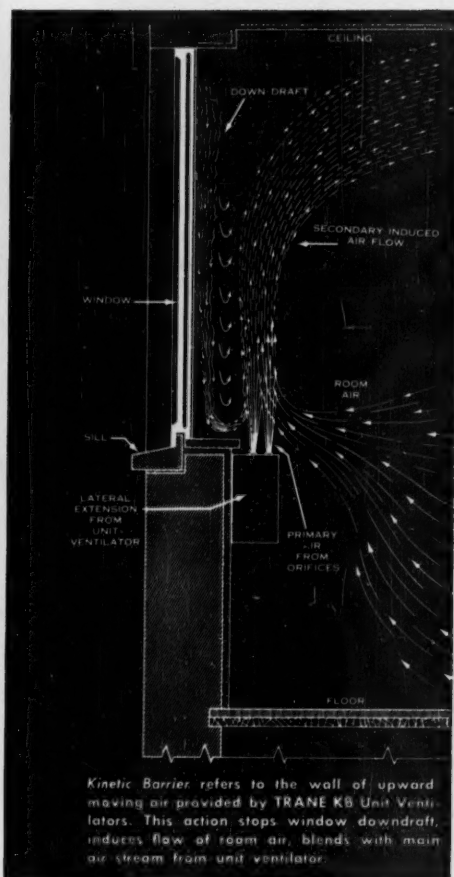
**New! Exclusive Trane Unit Ventilator System**  
creates Kinetic Barrier which (1) stops window downdrafts every minute room is occupied, (2) improves distribution of heated and ventilated air, and (3) operates quietly  
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Not since the first unit ventilator has there been such a significant improvement in school comfort.

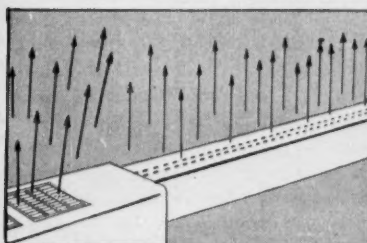
The new TRANE Unit Ventilator System actually accomplishes what architects, engineers, contractors and school authorities have long agreed would be the ideal.

**How Trane System differs.** The use of *warm* air for intermittent "blanketing" of windows during the heating cycle has been common practice for many years. However, this still leaves pupils exposed to downdrafts since *cooling* is required about 75% of the time due to high heat gains. The new TRANE system differs in that it is effective *at all times*—during cooling as well as heating cycles. It operates every minute the room is occupied . . . even when the heat is off.

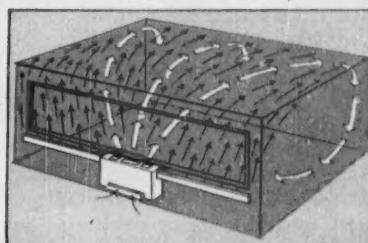
## HOW TRANE Kinetic Barrier SYSTEM WORKS



Kinetic Barrier refers to the wall of upward moving air provided by TRANE KB Unit Ventilators. This action stops window downdraft, induces flow of room air, blends with main air stream from unit ventilator.



Outdoor and room air is drawn into the TRANE Unit Ventilator in desired proportions where it is blended, filtered and brought to the proper temperature. It is then forced upward from the central unit and from lateral extensions along the entire window wall.



Rising air creates Kinetic Barrier which blocks drafts at source, draws room air to ceiling. These air streams blend and circulate around room in a continuous draft-free cycle. Air fans out from central unit, assists air from extensions to penetrate every corner.

**Report describes new system in detail.** Just published. Contains results of an investigation of the TRANE Kinetic Barrier System of unit ventilation operating in an actual "problem" classroom during the winter of 1952. If you are concerned with modern schoolroom heating and ventilation, this report is "must" reading. Write for your copy today. The TRANE Company, La Crosse, Wis.

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# NEWS IN REVIEW

## President Urges Education for World Understanding

WASHINGTON, D.C.—In his first address to a major national educational organization since taking office, President Dwight D. Eisenhower spoke briefly at the opening session of the 36th annual meeting of the American Council on Education. Speaking October 8 to an audience of nearly 500 educators, most of them college presidents and deans, Mr. Eisenhower welcomed them to Washington and made humorous mention of his own brief service as a college president.

He urged the group in its consideration of the theme "New Dimensions for Education" to discover new ways in which education can promote international understanding. To illustrate this need he cited some of his own experiences in trying to understand the customs and the way of life of the people of North Africa with whom he came into contact during World War II. The President took special note of the good that had been derived from the international exchange of students and teachers. He said that educators all over the world should be working to promote international understanding.

The President's brief greetings were followed by addresses from President Margaret Clapp of Wellesley College, who spoke on major problems in higher education, and from Prof. Herold C. Hunt of the graduate school of education at Harvard University, who spoke on major problems of the schools. In her address, Dr. Clapp suggested that colleges should cease striving for more diverse curriculums and physical plants merely for the sake of competing with other institutions. She said it was a question of planning for lasting values rather than pleasant conveniences. Dr. Clapp closed on a note of concern that, with more and more young people going into advanced study, society might demand more control of thought and inquiry in higher institutions. In short, she said, the question is, how free do we want individual members of American society to be?

Professor Hunt, until recently superintendent of the schools of Chicago, paid a handsome tribute to the late U.S. Commissioner of Education, Lee M. Thurston, who had originally been

scheduled to address the council at this time. Dr. Hunt called attention to the needs of American public schools, but he also cited tremendous improvements that have been made in the last 50 years and ended his address on an optimistic note.

## Dr. Morrison to Head Special Program for Puerto Ricans



J. Cayce Morrison

With Puerto Ricans entering New York City at the rate of 1000 per day, the need for a director of a program to improve the teaching of Puerto Rican children in the city's schools has become increasingly apparent to public school officials here. Appointed to this newly created position is J. Cayce Morrison, former assistant commissioner and coordinator of research in the state education department since 1950.

Financed by \$160,000 from the Fund for the Advancement of Education of the Ford Foundation, the program of adjustment being undertaken by the public schools will be concerned with the development and evaluation of effective methods, materials and organization for helping Puerto Rican children to learn English and become adapted to American schools and with helping their parents to make an effective adjustment to the community and the community to adjust to the parents and their children.

Dr. Morrison has been associated with the state department of education continuously since 1926. From 1920 to 1923 he was the department's specialist in educational measurements. He served as assistant commissioner for elementary education from 1926 to 1937, when he became assistant commissioner for research.

He has been a member of the board of editorial consultants of *The NATION'S SCHOOLS* since August 1931.

For several months during 1951, Dr. Morrison served as technical adviser on educational administration and finance to the government of the Philippines.

## Samuel M. Brownell Named U.S.O.E. Commissioner

WASHINGTON, D.C.—Samuel M. Brownell, president of New Haven State Teachers College, New Haven, Conn., and professor of educational administration at Yale University, has been appointed U.S. Commissioner of Education. His appointment must be confirmed by the Senate after Congress convenes.

Dr. Brownell succeeds the late Lee M. Thurston, who died September 4 after two months in office.

The new commissioner's experience includes 10 years as superintendent at Grosse Pointe, Mich., two years as principal of the demonstration high school at Peru State Teachers College, Peru, Nebr., and a year as a member of the faculty of the state teachers college at Albany, N.Y.

Dr. Brownell has been a member of the board of editorial consultants of *The NATION'S SCHOOLS* since July 1937. In the 25th anniversary (January 1953) issue of the magazine he was the author of an article on teacher education.

## A.F.L. Demands More Say in Vocational Education Programs

WASHINGTON, D.C.—Dissatisfied with the performance of the public vocational schools, the American Federation of Labor is demanding a part in directing future federally aided vocational education programs.

The A.F.L. in Washington called upon the Office of Education to set up an advisory committee, with labor heavily represented, to redirect the national policies of vocational education. Federal officials are giving the proposal "sympathetic consideration."

Labor's dissatisfaction with the performance of the public vocational schools is approaching the status of a *cause celebre*. During the past several years labor leaders have pointed to the "poor showing of the trade schools." In 1953 the subject again came before the A.F.L. national convention in St. Louis. The action demanding a new national advisory committee had the convention's approval.

Labor's case has been recently summed up in these words by the executive council of the A.F.L.:



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## NEWS...

"At no recent time has there been any close functional cooperation between labor and those administering the vocational programs. The lack of a closer working relationship in the vocational program is in part due to the rigidity of the public school organization, but more fundamentally due to the contemptuous disregard in which labor and vocational training are held all too often by school administrators and teachers.

"We have often called attention to

the fact that pupils with low I.Q.'s are told to take vocational work; those with high I.Q.'s are advised not to. In many cities, vocational schools themselves do not have the same scholastic standing as do the purely academic schools. Pupils in vocational schools are often not allowed to participate in interscholastic contests with those from academic schools.

"There is no doubt about it: There is a caste system in our educational structure which places the manually

adapted pupil and adult below the others."

It is time, adds the executive council, "that the entire vocational program conducted jointly by the federal government, the states, and local communities be critically reevaluated."

Labor leaders have in the past been primarily interested in seeing that the vocational schools provided "practical training" so that the young graduate could earn a living. In recent years, the emphasis has shifted. Labor is not quite certain whether it likes the idea of separate vocational and trade schools. A report received in Washington from the Baltimore Federation of Labor has this to say:

"Stated in plainest terms, the concept behind the program of vocational education would segregate the young people who are to become industrial workers from those who are to go into the professions and other scholarly pursuits and would provide separate school facilities for these two groups."

In a democracy this is intolerable, says the Baltimore labor body. It has therefore sent to Washington the following resolution:

"We submit that our school authorities examine current school practices with the view to maintaining a single educational system that provides a general education for all children and further that vocational education be integrated into the regular school curriculum in the type of high school variously called comprehensive, core and functional."

### Lost: 200 New Teachers Hired in New York City

NEW YORK.—Of the 1100 new teachers appointed to teach this year in New York City public schools, 200 failed to show up on the opening day of school. Examinations for conditional licenses for persons of "minimum" qualifications were scheduled by the board of education to make up for the appointed teachers who did not report. This move has been denounced as a "makeshift solution" by the New York Teachers Guild, A.F.L.

The guild said the city schools offered lower salaries than "many school systems throughout the country" and could not compete with salaries of other occupations or of many near-by systems.

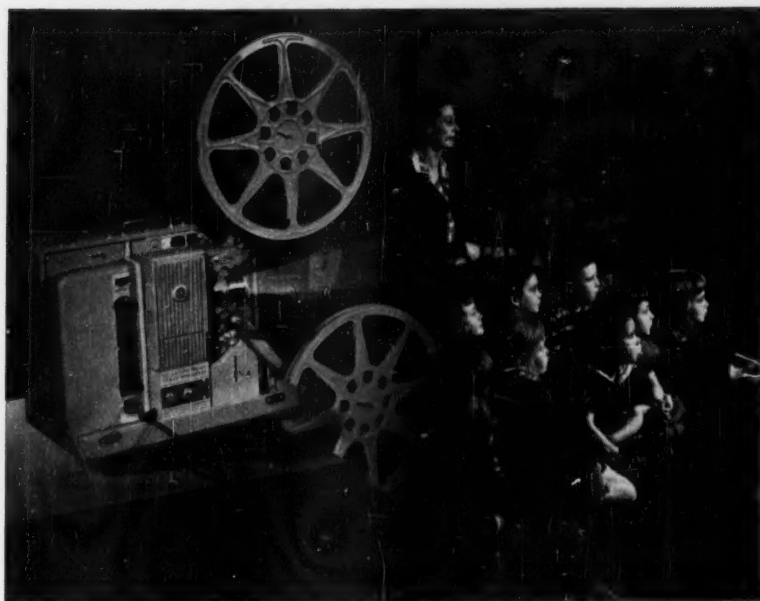
It renewed previous demands for establishment of a list of "quota teach-

These two youngsters are putting on *invisible gloves*! How? Simply, by washing their hands with liquid SDC skin degerming cleanser. SDC provides a continuous barrier to infection and disease transmission; protects against secondary infections resulting from cuts and abrasions.

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But there are a good many other features about Pageants that you will like, too. Take the Pageant, Model 1, shown above, for example. At its moderate \$400 price, this is the economical, top-

choice machine for sound and silent projection under average conditions. Should you need greater sound distribution, simply plug in the Kodak Multi-Speaker Unit—3 extra speakers in matching case at only \$92.50. But if you need extra light or power, check (below) the Pageant that best meets your need.

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### Here's what A-V experts are saying about Pageants



"For years our service department has received all makes of projectors that have been abused from over-oiling as well as for the lack of proper oiling. Of course, these projectors came to us for repairs as a result of mechanical failures which, in many cases, occurred during the presentation of a classroom film. In our estimation, oiling is the number one problem of most projectors. Now, thanks to Kodak, the Pageant Projector, which requires no lubrication by the user, has solved this problem."

R. Hilton McCrory  
Stanley Projection Company  
Alexandria, La.



"There's no doubt about it—improper lubrication is the chief cause of sound-projector breakdowns. A large percentage of projectors that come back to our shop have been either over- or under-oiled. Often this results in big repair bills, to say nothing of the time the projector is out of service. That's why we're getting so many calls for the permanently pre-lubricated Pageant."

William L. Weeden  
Oscar H. Hirt, Photographic Supplies  
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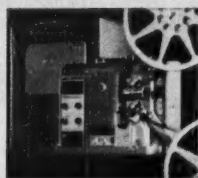
"Practically everybody knows that too little oil will cause working parts to wear out and result in projector failure. But few people seem to realize that over-oiling is just as bad. It gums up parts and stalls motors. Many of our customers have found the permanently lubricated Pageant a happy solution to this problem."

William C. Relke  
Relke Company  
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"Most projectors that come to our service department for repair are found to have suffered from improper lubrication—either too much or too little. With the Kodascope Pageant this critical maintenance problem has been eliminated. The Pageant is a fine projector at a reasonable price."

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Midwest Visual Education Service  
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☐ Kodascope Analyst ☐ Eastman 16mm. Projector, Model 25  
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## NEWS...

ers" available for such emergencies and that "pending a full-scale revision of the present salary scale, the board of estimate take immediate steps for a \$700 increase in salary for all New York City teachers and supervisors." The guild urged all citizens, "particularly parent, labor and civic organizations," to support these demands.

In a message to Supt. William Jansen, the Teachers Union, independent, said the defection of 200 teachers was "proof of the low esteem in which our school system is held" and urged him to reinstate the more than one hundred teachers no longer in the schools as a result of the investigation of subversion among teachers. Most of them are members of this teachers' organization.

## F.C.C. Upholds Right of Educational TV Foundation

NEW ORLEANS.—The Federal Communications Commission has "saved the day" said Emile A. Wagner Jr., attorney for the Greater New Orleans Television Foundation, referring to the action taken by the F.C.C. in retaining the city's priority on Channel 8, after it had been applied for by a commercial station.

The channel is one of 242 originally reserved by the F.C.C. for educational use by communities throughout the country.

The commercial concern had its petition for rights to the city's educational channel rejected on the basis of the articles of incorporation of the foundation—a complete program of station operations; a statement of present and prospective finances, and details of programs to be televised.

Explaining that the petition had been dismissed without a formal hearing, in which both sides would have presented their cases, apparently because of the evidence submitted by the foundation, Mr. Wagner said, "What the F.C.C. has done in effect is to give us more time to raise the necessary funds."

The petition was the first filed by a commercial applicant for an educational channel, Mr. Wagner said. Because of this, he added, the decision by the F.C.C. is "significant" and one that will be watched by other cities similarly affected.

In setting aside the educational TV channels about two years ago, the F.C.C. had said that after June 1953





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
#### Ceko concrete joist construction

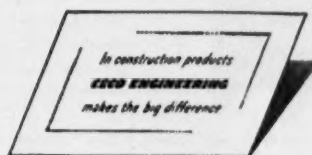
Here you can expect savings over solid slab and other heavier types of concrete construction, because less steel, concrete and lumber are used . . . less labor too. Meyer steelforms are reused at a nominal rental fee. Murphy & Mackey, architects, saved \$50,000.00 by using concrete joist construction instead of solid slab in the Bishop DuBourg High School, St. Louis, Missouri.

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## NEWS...

commercial interests might seek the channels not formally applied for by communities for which they were intended.

### Educators Told How to Get Educational TV Funds

CHICAGO.—Educators were told how to assist in the fund raising for the educational television station here at a meeting in September.

The meeting was sponsored by the Chicago Educational Television Associ-

ation, which will operate Channel 11 when it goes on the air next year.

John T. Rettaliata, chairman of the 16 member group of educational and cultural organizations sponsoring Channel 11, told 100 high school superintendents of the Chicago area to:

1. Volunteer to talk before groups and thus spread information and enthusiasm that will result in contributions.
2. Be persuasive solicitors among friends and neighbors.

3. Enlist friends to help.

4. Make personal contributions.

Said Dr. Rettaliata, "It would be folly for us to sit back, to philosophize, and to become preoccupied with program debates. We have no right to expect our neighbors and fellow citizens to be interested if we fail to set an example of activity."

Pointing to educational television's potentialities in adult education, he said it is a more powerful teaching medium than movies, radio or records because it combines the advantages of all.

### Schools Advised to Share Test Results With Public

CHICAGO.—"How can schools know how well they're doing?" was the central question raised by educators from five midwestern states at a conference in Chicago September 29. The answer they heard was "tests"—and let the public in on the results too.

School administrators and key guidance personnel from Illinois, Indiana, Iowa, Michigan and Wisconsin were invited by Science Research Associates, sponsors of the conference.

The first item of business was an answer by Lyle M. Spencer, president of Science Research Associates, to the widely asked question, "Why is public support of schools at the level it is today?" Using the analogy of a business firm engaged in market research, Mr. Spencer suggested that the schools devote more attention to testing their product—the educated child. He urged schools to share with lay citizens the results of the tests.

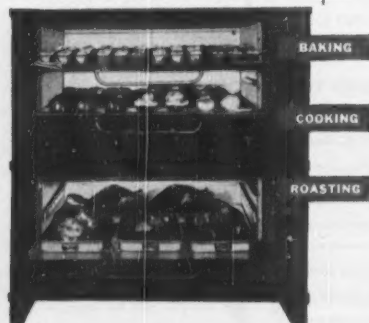
He suggested four reasons improvements and innovations fail to get popular support: (1) They are not needed; (2) the timing is poor; (3) the quality is poor, or (4) an inadequate job of pre-selling is done.

The purposes of an adequate testing program were outlined by E. F. Lindquist, director of Iowa Testing Programs, State University of Iowa. Dr. Lindquist reminded the school people that a testing program enables teachers to become better acquainted with the individual differences of their pupils, enables pupils and parents to get better acquainted with themselves, and helps teachers and administrators qualify their thinking on the objectives of education.

Schools should be more interested in the measurement of growth and



Young healthy appetites demand nourishing meals. This modern kitchen tool is ideal for schools to keep a steady stream of oven-prepared foods flowing to the school tables . . . THREE WAYS . . . ROASTING . . . BAKING . . . GENERAL OVEN COOKERY. The speed and flexibility of a Blodgett Oven make it possible to cook your food to perfection and have it ready on schedule. Dietitians recognize in hot, nourishing oven-prepared meals the best means of serving a wide variety of meals at prices students can afford to pay.



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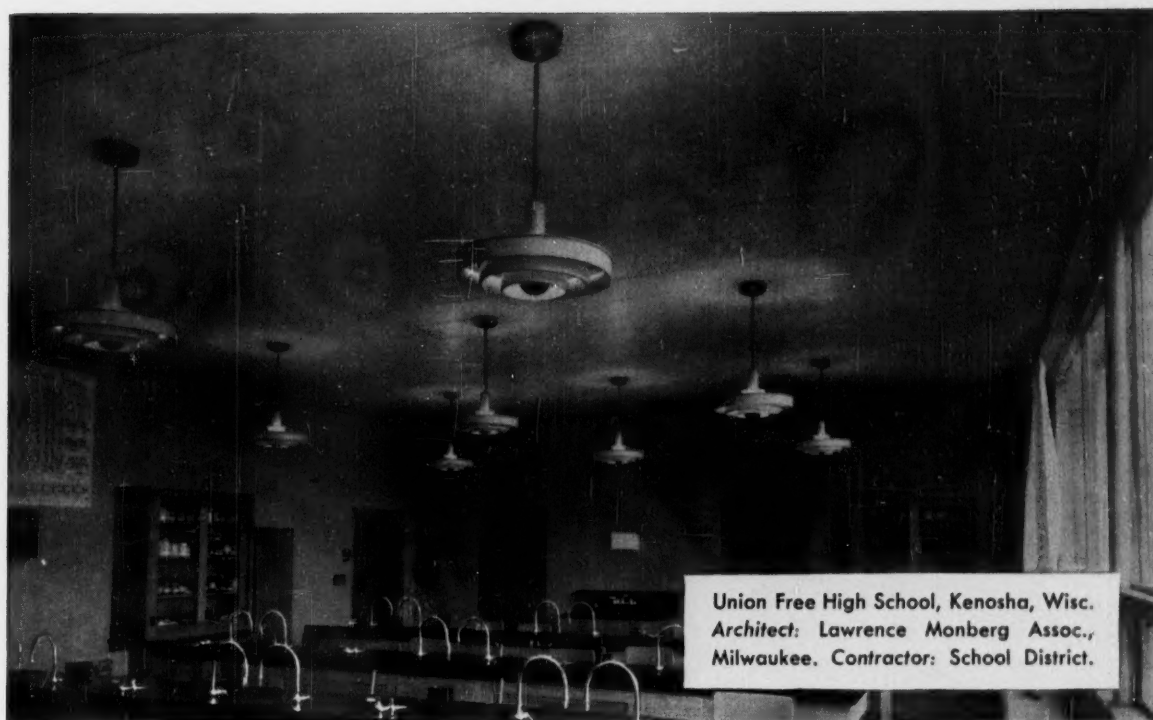
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Here's a wonderful, economical way to hush the hubbub in corridors and rooms in the new building you're planning.

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An "AD" Panel is a box beam with a flat surface top and bottom and open space between. The top surface forms the subfloor or roof deck. The perforated bottom surface forms the ceiling. In the open space is glass fiber insulation (see

illustration below).

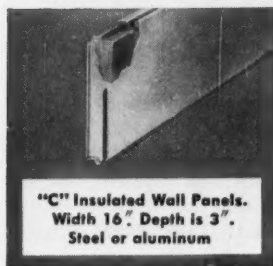
You can see how a Fenestra combination Structural-Acoustical Ceiling cuts building costs. It is speedily and easily erected—the panels interlock. It is practically indestructible. Bumps and knocks can't hurt it. The acoustical efficiency is not affected by washing or painting. And these panels are noncombustible.

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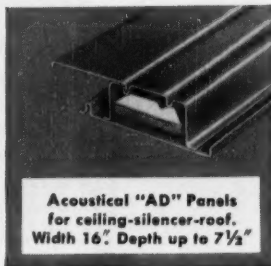
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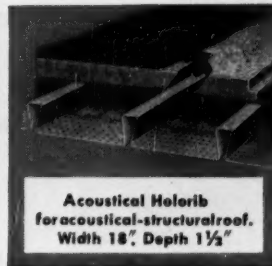
### METAL BUILDING PANELS



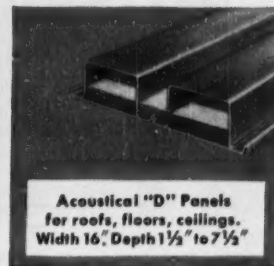
"C" Insulated Wall Panels.  
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Acoustical "AD" Panels  
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Width 18". Depth 1½"



Acoustical "D" Panels  
for roofs, floors, ceilings.  
Width 16". Depth 1½" to 7½"



## NEWS...

the improvement of pupils than of the status of pupils at any given time, according to Dr. Lindquist. This means, he said, that "the testing program must be continuous and periodic rather than spotty and sporadic."

The all-day conference concluded with an address on mental health by William C. Menninger, M.D., general secretary of the Menninger Foundation, Topeka, Kan. Reminding the educators that the goal of education is "how to make a life rather than

how to make a living," Dr. Menninger stressed the important contribution of the schools to the mental health of pupils and teachers.

"In the battle for mental health the educator is in the foxhole, while the psychiatrist is in the base hospital," according to Dr. Menninger. Calling the attention of the educators to the fact that the schools have some function in therapy related to mental health, Dr. Menninger developed the thesis that a dynamic curriculum is a

positive force for mental health in the community. A dynamic curriculum, according to Dr. Menninger, means that the pupils are given experience in analyzing consequences and results as well as acquiring static knowledge.

Approximately 250 administrators and guidance workers attended the conference.

### Parent Asks Ruling on Nuns in Public School

JOHNSBURG, ILL.—With the opening of a new parochial school building here, a lawsuit on the legality of nuns teaching in public schools may be sidetracked.

The suit was filed by Mrs. Dorothy Larson, a resident of the community, whose two children attended the elementary school here which has been staffed by six nuns. The action was taken by Mrs. Larson on the grounds that "textbooks were Catholic in viewpoint" and she had found Catholic pictures and statues in use at the school.

Fifteen years ago a fire destroyed the public school, and all the children attended the parochial school. When the new elementary building was completed, the nuns were appointed to its staff, and the parochial school went out of existence.

John Looze, the attorney representing the local school board and the six nuns who have been teaching, asked dismissal of the suit for an injunction and a legal ruling in the case, since the situation has now been corrected. The nuns have resigned from the public school faculty.

Judge Bernard Decker of the circuit court at Woodstock, Ill., said he would rule on the matter October 29.

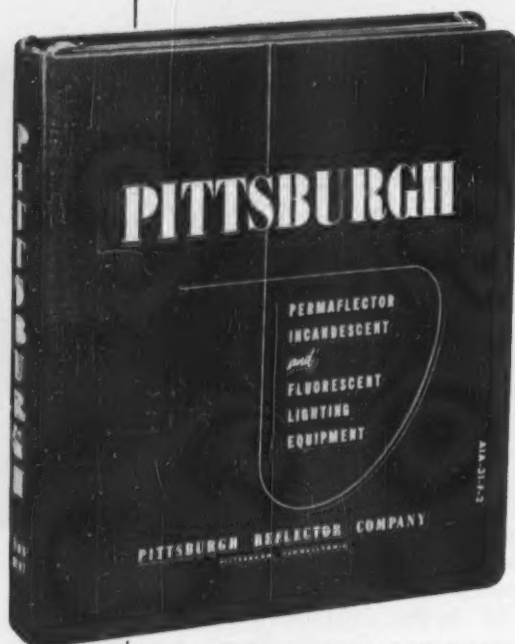
### President Urges Observance of American Education Week

WASHINGTON, D.C.—The following statement relative to American Education Week has been released by President Dwight D. Eisenhower:

"The celebration of American Education Week summons the thoughtful attention of every American citizen.

"The youth of our nation—who are the future of our nation—are the hope and the test of freedom itself. In homes, farms and factories—in the schools, senates, and churches of the next generation—the youth of today will tell by their deeds the fate of

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# Nyco Display Rail

## Has These Features

NYCO DISPLAY RAIL provides an easy, convenient way to display maps and charts (singly or in sets), also small pictures and seat work. Maps of any width can be hung from the Nyco Display Rail. The steel hooks slide easily to any position and are strong enough to hold a set of maps in a case. It is easily attached to the chalkboard moulding of a new or old building. The  $\frac{1}{4}$ -inch cork inlay is a veritable bulletin board.

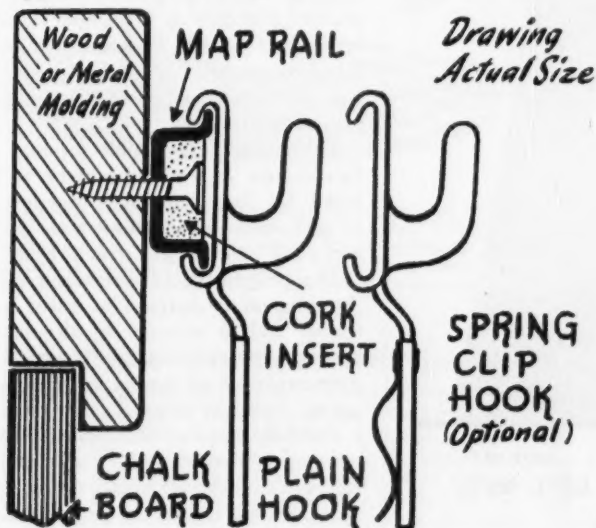
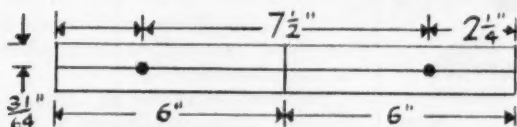
### PRICES

Rail	No. 90 Cork Lined	No. 91 Without Cork
Less than 100 feet. Per foot.....	\$0.42	\$0.31
100 to 500 feet. Per foot.....	.39	.29
Over 500 feet. Per foot.....	.36	.27

### Hooks

No. X900. Plain Hook. Each.....	17c
No. X910. Spring Clip Hook. Each.....	22c

### SPECIFICATIONS



### THE RAIL

is made of (a) 18 gauge, (b) cold rolled steel, (c) with nickel finish.

### THE CORK STRIP

has a burlap backing. The strip always fits tightly.

### THE BRASS EYELETS

in every screw hole prevents screws from cutting through the cork.

### THE TABBED HOOK

holds single spring roller mountings in upright position—necessary if spring roller is to function properly.

### No. 90 Nyco Display Rail, Cork-lined

18 gauge cold rolled channel steel, copper under-coating and finished in dull nickel. Lower edge of rail notched at intervals of approximately two feet to permit insertion or removal of hooks. Width of rail one inch. Available in 3 and 6 foot lengths.

Cork inlay  $\frac{1}{4}$  inch thick and  $\frac{5}{8}$  inch wide, burlap backed to run continuous length of rail.

Screw holes provided with nickel plated, counter sunk collars. Cork inlay available in either tan or green.

### No. 91 Nyco Display Rail, Without Cork

No. X900 plain hook, 18 gauge steel, nickel finish. Constructed to grip the rail tightly when weighted with a map and to slide easily when weight is released. Projecting tab to insure proper operating position of maps mounted on spring rollers and to protect chalkboard moulding.

No. X910 spring clip hook same as No. X900 but equipped with spring clip on projecting tab.

Both hooks will fit either No. 90 or 91 rail. It is customary to order two hooks for each four feet of rail.

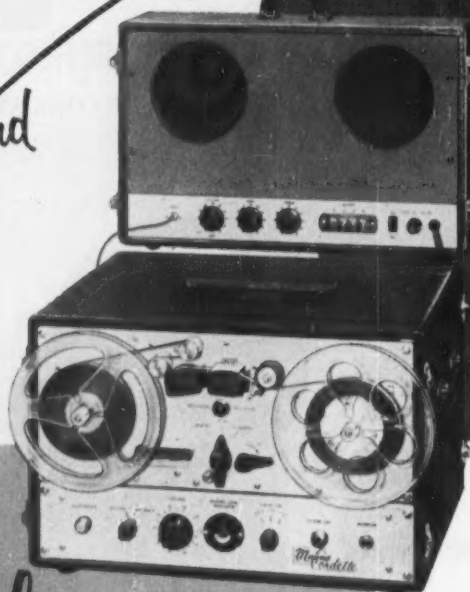
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recording  
system  
designed and  
priced for  
schools*



**the  
NEW  
portable  
magne** *Cordette*

**Recorder-playback-P.A. system  
complete in one carrying case**

Now! It's the first one-case hi-fidelity recording system available to schools—the first audio system so fine, so complete, so versatile! And it's priced far, far below all other professional equipment!

For hi-fidelity playback, an amplifier-speaker system has been mounted in the same case with the world-famous Magnecordette. The recorder and speaker unit can be separated up to 1000 feet and volume can be controlled from either unit. And it can be used alone as a P.A. system—with microphone, radio, phono, or other sound sources.

*Look for the name of your dealer  
under "recorders" in the phone book*

**Magnecord INC.**

325 West Ohio Street, Chicago 10, Illinois

**\$499.50  
COMPLETE**

**WRITE TO  
DEPT. NS-11**

## NEWS...

those values which, cherished by the free through centuries, have given life and dignity and purpose to our own America.

"This—nothing less—is the measure of the task served by the teachers of our nation today. Such a responsibility demands not only essential and elaborate material paraphernalia: buildings, endowments, salaries, laboratories. It demands, above all else, strength and perception of heart and of mind.

"Our teachers are summoned to be patriots in the highest sense of the word: to teach the principles that bring freedom and justice to life; to make clear that enjoyment of liberties means acceptance of duties, and to impart the priceless knowledge that duty, in an age of peril, means sacrifice.

"Our whole citizenry is summoned to help the teachers in their great work: not only to provide them with the resources they need but also to guard with devoted vigilance the freedom of thought and discussion which inspire free men to teach all men how to be free."

### **Peabody and Vanderbilt Join in Teacher Education Program**

NASHVILLE, TENN.—Two of this city's universities will coordinate their faculties and facilities to train 30 future secondary teachers in a program containing significant modifications of the usual approach to high school teacher education.

The Ford Fund for the Advancement of Education recently made a grant of \$300,000 to Vanderbilt University and George Peabody College for Teachers here to inaugurate the plan for the preparation of promising high school teachers.

Thirty candidates eligible for master's degrees in teaching will be selected for four consecutive quarters of graduate work. Of this amount 30 hours will be in subject content fields.

The professional education half of the program is designed to orient a teacher and to provide an adequate historical, philosophical and practical preparation for the teacher in contemporary American society.

Carefully supervised practice in teaching is accompanied by a discussion seminar designed to take the place of traditional courses in professional education. Faculty members from Pea-



4 better ways...



**SHINES IN MINUTES — LASTS FOR WEEKS.** STANDARD Liquid Wax holds its gloss and resists scratching under heaviest traffic. No buffing, easily applied with mop or pad. Recommended for linoleum, rubber tile, composition, and finished hardwood floors. Water emulsion base, not petroleum. Meets Underwriters Laboratories anti-slip requirements.

to beat large-scale



**NON-SLIP—PERMANENT SEAL.** STANDARD Penetrating Sealer (Heavy Duty) penetrates pores of wood, seals with hard waterproof gums and oils. Forms non-slip, non-gloss surface. Excellent base for wax. Approved by Maple Flooring Mfrs. Ass'n. Meets Underwriters Laboratories anti-slip requirements.

traffic problems



**NON-SLIP — HIGH GLOSS.** STANDARD Super Finish (Gym Finish) gives high-gloss finish to gym and other wood floors. Tough, durable—resists rubber markings, boiling water, alkalies, mild acids, heat and cold. Also for cork, linoleum, magnesite, cement. Approved by Maple Flooring Mfrs. Association. Meets Underwriters Laboratories anti-slip requirements.



**TOPS FOR FURNITURE, WOODWORK.** STANDARD Liquid Gloss (formerly SEMDAC Liquid Gloss) restores lustre, helps conceal scratches. Cleans and polishes in one operation. Also preserves unfinished floors, holds down germ-laden dust. Fire-safe—Meets Underwriters Laboratories requirements.

#### STANDARD OIL COMPANY (Indiana)

Chicago, Ill. • Decatur, Ill. • Peoria, Ill. • Joliet, Ill. • Evansville, Ind. • Indianapolis, Ind. • South Bend, Ind. • Detroit, Mich. • Grand Rapids, Mich. • Saginaw, Mich. • Duluth, Minn. • Mankato, Minn. • Minneapolis, Minn. • Green Bay, Wis. • LaCrosse, Wis. • Milwaukee, Wis. • Des Moines, Ia. • Mason City, Ia. • St. Louis, Mo. • St. Joseph, Mo. • Kansas City, Mo. • Wichita, Kan. • Omaha, Neb. • Denver, Colo. • Cheyenne, Wyo. • Billings, Mont. • Huron, S. Dak. • Fargo, N. Dak.

**FOUR BETTER WAYS.** All four of these better ways to beat large-scale traffic problems are packaged in quantities up to full barrels and are available for immediate delivery from over 3900 warehouses in the Midwest. That means there's a convenient source of supply near you. Order now. If you have a special floor maintenance (or insect control) problem you can get expert advice from your nearest sales office, listed left, below. Call today for service.



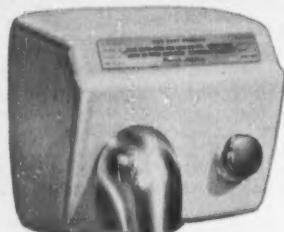
## Why did MARQUETTE UNIVERSITY install OVER 50 NATIONAL HAND DRYERS?



View of one of the washrooms in Brooks Memorial Union, Marquette University, Milwaukee, showing students using a National Hand Dryer. Over 50 National Dryers are also installed in men's and women's washrooms in other buildings comprising the University.

**To reduce maintenance cost.** National Hand Dryers eliminate cost of towels, storing of towels, filling cabinets, disposing of towels, cleaning washrooms, plumbing service.

**To secure improved sanitation.** Impartial tests conducted by the U.S. Health Service prove conclusively that National Hand Drying is far more sanitary than hand drying by any other method. Ask for complete Public Health Report.



**...dries hands completely  
dry in 20 seconds!**

**Do you really know** how much your washroom service is costing you? Save 85¢ out of every \$1 you are now spending for washroom maintenance. Fill in coupon and attach to company letterhead for complete information.

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Send me the facts. Cost comparison of towels vs. National Hand Dryers, Public Health Service Report and descriptive literature.

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Company \_\_\_\_\_  
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NB 9 (11)

## NEWS...

body and Vanderbilt, representing the various subject-matter fields, as well as education and psychology, will meet in study groups and work sessions to deal with all the aspects of teaching.

### Community Leadership Gets New Emphasis at Columbia

NEW YORK.—Teachers College, Columbia University, announced recently a major change in the program of its second largest department, educational administration.

The department of educational administration has been revamped and enlarged over the last three years at a cost of \$1,000,000 in order to make way for the new program. The purpose of the program will be to train students primarily for community leadership rather than merely as school administrators. Among the many features in the new curriculum are revised classroom instruction, particularly on the doctorate level; enlarged opportunities for field work, and new research facilities.

It was noted that the curriculum would place heavier emphasis on field experience. Students will participate in school surveys, serve internships in the offices of superintendents of schools and engage in research into administrative problems.

The program seeks to produce school administrators who will be skilled in dealing with parents and other community groups, the press, and broad management problems that are not restricted to the individual school.

### Vocational Association Plans Administrators Day

CHICAGO.—At the forthcoming American Vocational Association convention, one day will be devoted to a feature inaugurated for the first time this year—Administrators Day, chaired by Ralph C. Wenrich, head of the vocational education department, University of Michigan.

The association, which will meet here November 23 through 28, has planned a meeting covering a variety of interests of association members. Topics for sectional meetings include: agricultural education, business education, distributive education, home economics, industrial arts, trade and industrial education, and vocational guidance.

Harold E. Stassen, foreign operations administrator, and Edward J.

## start roller skating for health and recreation



### A WONDERFUL SPORT at low cost and upkeep

It's easy to start a roller skating program! It's a healthful exercise and the popular way to build strong bodies. A favorite with boys and girls and budget planners, too . . . roller skating makes a grand co-recreational activity. Handles the largest groups quickly and easily. Halls, gyms, or any large floor area make fine roller rinks. Invest in health and fun this season.

### Rubber Tire Skates

FOR USE ON WAXED FLOORS IN  
Gyms, Ballrooms or Halls



WHEELS  
ABSOLUTELY  
GUARANTEED

NOT TO MAR, SCRATCH OR DAMAGE

Rink clamp skates developed by CHICAGO specially for skating on waxed floors. The rubber wheels are ideal for use on tile, ballroom floors or any highly waxed surface. Will not harm or mark.

Write Now to the Leader in Rink  
Skates on How to Start

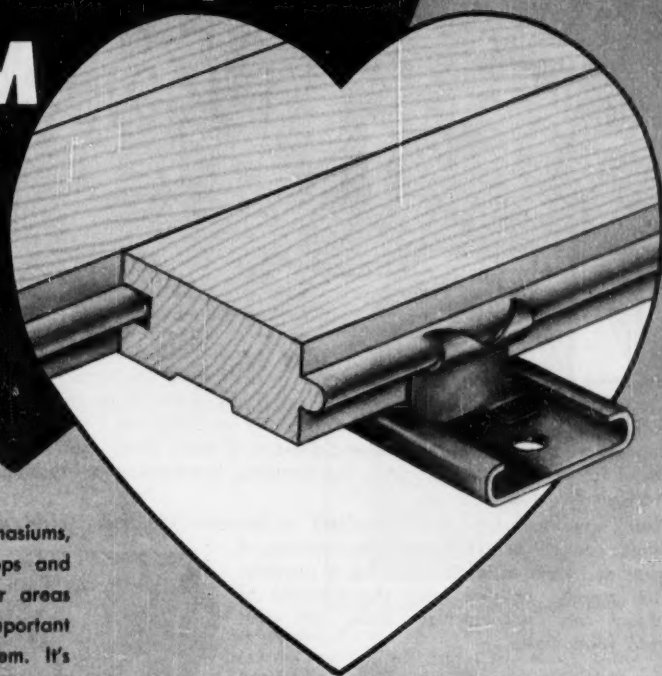
## "CHICAGO"

ROLLER SKATE COMPANY

The Choice of Champions . . . for over 45 Years  
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# *The HEART of the* **LOXIT FLOOR-LAYING SYSTEM**



*I*nstallations all over America—in gymnasiums, field houses, auditoriums, ballrooms, shops and other buildings having large wood floor areas laid on concrete — are proving the important advantages of the Loxit Floor-Laying System. It's SO simple — SO practical! You see the "heart" of the Loxit System in the illustration above. Only three parts are needed: a channel with turned-in edges, a uniquely-designed clip, and the anchor for securing the channel to the concrete. This simple mechanical wood floor laying system requires NO nails, NO wood sleepers and NO adhesives. It limits expansion and compensates for contraction. The result is a floor which remains permanently beautiful with a minimum of maintenance.

*Write Today for Complete Details,  
Including Samples and Catalogs*

FLOORS ARE IMPORTANT — CONSULT YOUR ARCHITECT

## **LOXIT SYSTEMS, INC.**

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## NEWS...

Condon, vice president in charge of public relations for Sears Roebuck and Company, are among the speakers scheduled to address the delegates.

### Teaching Aid on U.N. Available for All Grades

WASHINGTON, D.C.—The National Education Association and the American Association for the United Nations have issued a special teachers handbook and kit, "United Nations in the Schools," to be used as an aid

to teaching about the U.N. and world affairs in both elementary and secondary schools.

The handbook, outlining practical teaching suggestions for all grade levels and containing bibliographies and resource listings, was prepared under the direction of Eva M. Dratz of the Minneapolis public schools.

The kit may be ordered from the N.E.A. Committee on International Relations, 1201 Sixteenth Street, N.W., Washington 6, D.C.



Thrill your diners with delectable steamed puddings—so popular at Thanksgiving and Christmas, and a special treat for any day from Fall to Spring.

Steamed puddings are easily prepared in quantity if you have a *Steamcraft* or *STEAM-CHEF* steam cooker. And if you serve 100 or more meals per day you'll find your steamer indispensable for preparing more appetizing vegetables, meat, fish, fowl and desserts of many kinds. You'll find it ideal for blanching french fries, for warming, pre-heating or freshening various other foods.

You'll save time, too. A *STEAM-CHEF* or *Steamcraft* is always ready for work, cooks faster, and eliminates scouring of pots and pans since no scorching is possible. The steady, uniform heat—characteristic of steam—cuts "pot-watching" time, fuel costs and food waste.

Get all the facts about *STEAM-CHEF* (heavy-duty) and *Steamcraft* (for smaller kitchens). Available for direct steam, gas or electricity—in sizes to fit your needs.



Write for informative booklet  
"For Better Steaming"

#### THE WINNER

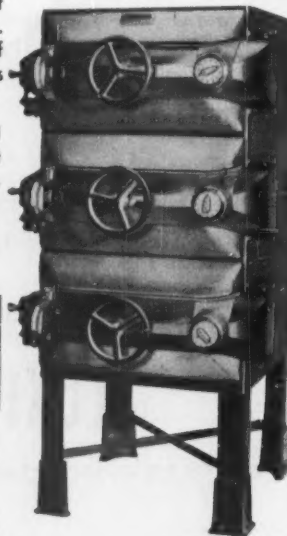
Educational 24-minute sound, color movie. Gives dramatic steam cooking demonstration. Available on request for showing to groups.

### THE CLEVELAND RANGE COMPANY

"The Steamer People"

3333 Lakeside Avenue

Cleveland 14, Ohio



### School Traffic Safety Plan Offered as National Standard

BUFFALO, N.Y.—A school traffic safety program has been adopted by the Institute of Traffic Engineers as the basis for a countrywide standard.

The plan, which has been tested in New York City for the last two years, has contributed to a saving in police manpower and has eliminated "wasted" traffic signal lights, according to a special technical committee of 14 engineers who developed the plan. The committee gave its report at a meeting of the institute here.

Under the plan pupils are routed to school on a safe, controlled path worked out in cooperation with parents, children and school administrators. T. T. Wiley, New York traffic commissioner, stated that the full value of the plan was realized where school safety patrols functioned at top efficiency.

### 1953-54 Funds for Federal Lunch Program Given

WASHINGTON, D.C.—The apportionment of funds for the National School Lunch Program of the 1953-54 school year has been announced by the U.S. Department of Agriculture.

Of a total appropriation of \$83,365,000 provided for this year's program, 80 per cent or \$67,010,000 has been distributed among the 48 states, District of Columbia and Alaska, Hawaii, Puerto Rico, Guam and the Virgin Islands, the Production and Marketing Administration of the department reported.

The distribution is made on the bases of the number of school children between 5 and 17 inclusive and the per capita income.

Also available is \$15,000,000 for the purchase and distribution to schools of foods which help to meet the nutritional requirement of school children, the Department of Agriculture announced.

### School Buying-Selling Code Now Being Considered

CHICAGO.—A buying-selling code for schools is in the making.

Four organizations—the American Association of School Administrators, the Association of School Business Officials of the United States and Canada, the National School Boards Association, Inc., and the National School Service Institute—are develop-

**they like to save money  
at Depew Central H. S., too!**



Depew Central High School, Depew, N. Y.

## **\$1,800 annual fuel saving with DUNHAM VARI-VAC HEATING**

**Over \$1,800.00 saved on fuel the first year!**

That's what Dunham Vari-Vac® Heating has done for Depew Central High School, Depew, N. Y.

Fuel bills before Vari-Vac were \$6,800.00 annually for coal. Fuel bills now—only \$5,000.00 annually for oil. A clear-cut saving of 26% in fuel costs since changing over to Dunham Vari-Vac.

Dunham patented temperature controls on high-



vacuum steam mains can lower *your* fuel bills, too. That's because outside weather and inside heat losses *promptly and automatically* control steam consumption so that *you use less steam*. What's more, you can "zone heat" with Vari-Vac to meet varying conditions of building exposure and occupancy.

Full cost-cutting facts and figures on Dunham Vari-Vac Heating are yours if you just clip and mail the coupon.



## **VARI-VAC HEATING**

**RADIATION • UNIT HEATERS • PUMPS • SPECIALTIES**

**QUALITY FIRST FOR FIFTY YEARS**

**C. A. DUNHAM COMPANY • CHICAGO • TORONTO • LONDON**

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Please send Vari-Vac literature.

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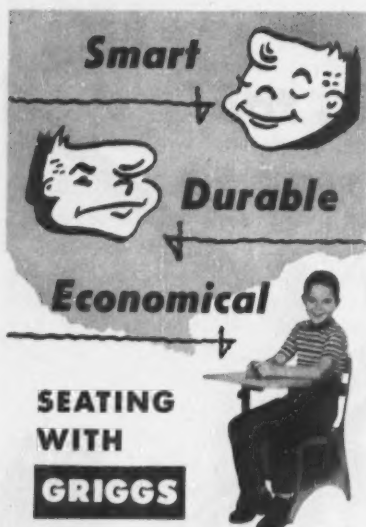
City  Zone  State

**Smart**

**Durable**

**Economical**

**SEATING WITH GRIGGS**



When you demand moveable classroom furniture that looks a little bit better and lasts a little longer, specify GRIGGS space-saving Skyliner Chair Desks. You'll be happy you did for years to come. GRIGGS Skyliner is available in three sizes and five colors and a variety of styles to suit your needs.

**GRIGGS ...TABLES AND CHAIRS**



If you're considering moveable tables and

chairs for your school, consider the best. GRIGGS tubular furniture is the increasing favorite of thousands of schools all over the country.

*Manufacturers of School, Church, and Theatre Seating*

**GRIGGS**

**EQUIPMENT COMPANY  
BELTON, TEXAS**

*Request Griggs Seating Catalog for full information on classroom seating.*

## NEWS...

ing jointly a buying-selling code that will be presented to each of the four organizations as soon as possible for approval, amendment or other action.

The code is intended to set forth certain principles designed to promote economy, increase services, ensure reliability, facilitate purchase and delivery practices, and establish buying and selling procedures on a high ethical and mutually satisfying basis.

### New York City to Build School of Printing

NEW YORK.—A site for the erection of a \$5,400,000 school of printing has been approved by the school board here.

After a suitable location had been sought for 10 years, approval was granted when the Roman Catholic Church of the Assumption agreed to the condemnation of property in the center of the block needed to complete the site.

The new building will provide facilities for 1500 students in addition to space for an apprentice program. It is planned to have 39 shops, 16 classrooms, nine special rooms, an auditorium, a gymnasium, a cafeteria, and a library. Final plans for the structure, however, have not been completed.

### Cornerstone Laid for New P.T.A. Headquarters

CHICAGO.—The cornerstone laying ceremony for the headquarters building of the National Congress of Parents and Teachers was held here September 24 during the annual meeting of the congress' board of managers.

Located at Rush and Huron streets, the building will be three stories high with a two-story wing. It is being built at a cost of \$750,000—of which \$562,583 has been contributed to date by P.T.A. members.

### Schoolhouse Construction Council Elects Officers

EAST LANSING, MICH.—At its annual program here at the Kellogg Center during the week of October 5, the National Council on Schoolhouse Construction elected the following officers: President, Charles D. Gibson, Los Angeles; vice president, W. R. Flesher, Columbus, Ohio; secretary-treasurer (reelected), W. D. McClurkin, Nashville, Tenn., and member of the executive committee, T. H. Naylor, Jackson, Miss.

## VENTILATION

... as vital in the wardrobe as it is in the classroom



Pat. No.  
2,149,575;  
2,617,155

Model 400  
(Illustrated)

SINCE  
**EMCO**  
1932

**classroom wardrobes**

Health considerations call for proper ventilation around childrens' wraps. This is why EMCO classroom wardrobes are designed with specific clearances beneath the doors and around the wraps. It is true EMCO space-saving wardrobes could be designed to save even greater space—but it would be at the childrens' expense by reducing garment ventilation or eliminating it.

Ventilation is only one of several distinctive advantages built into EMCO classroom wardrobes. You'll also appreciate EMCO features for cleanliness, safety and trouble-free service. For complete information write today for literature and name of nearest sales representative.

EMCO Wardrobes Are Available In Either Receding or Pivoting Types.

WARDROBES ARE OUR BUSINESS NOT A SIDELINE

**EQUIPMENT MANUFACTURING COMPANY, INC.**

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KANSAS CITY, MO.



# Clean floors better... Save money, too

with mops made of Du Pont Sponge Yarn



OUTWEARS ORDINARY YARN  
THREE TO FIVE TIMES



PERFECT FOR APPLYING WAX  
...OR FOR WET MOPPING



RINSES OUT EASILY, ALWAYS KEEPS  
A GOOD APPEARANCE



HIGHLY ABSORBENT, HOLDS MANY TIMES  
ITS WEIGHT OF WATER



HOLDS ITS SHAPE...  
LEAVES NO LINT, NO FLAGS



WON'T TANGLE,  
WON'T SOUR—EASILY STERILIZED



the same material as the popular



## DuPont Cellulose Sponge

Made of the same wonderful, work-saving material as famous Du Pont Cellulose Sponges, these new mops do a better, neater all-round cleaning job... and they do it quicker! And, you save money because they last longer than ordinary mops—no wonder more and more institutions are finding it pays to use mops made of Du Pont

Sponge Yarn!

Find out for yourself... give sponge yarn mops a trial and you'll see how much time and money they save you. Ask your supplier for these mops—or send coupon for *free* booklet and further information on where you can get mops made of Du Pont Sponge Yarn in your vicinity.



Better Things for Better Living  
... through Chemistry

**SEND for NEW FREE BOOKLET—**

E. I. du Pont de Nemours & Co. (Inc.)  
Cellulose Sponge Sec. D Wilmington 98, Del.

Please send me my free copy of the booklet describing Du Pont Cellulose Sponge Yarn's advantages for floor cleaning and maintenance.

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## NEWS...

### Chief State School Officers Urge Driver Education

WASHINGTON, D.C.—The nation's chief state school officers are unanimous in the belief that the youth of the nation should be given high-quality instruction in driving, according to Ralph Thomas, president of the American Automobile Association.

His statement was made in connection with the publication of a booklet, "All Chief State School Officers Favor High School Driver Education

Courses," which is to be distributed nationally.

Pointing out the congestion on the roads of the nation and the rise in traffic fatalities, Mr. Thomas said, "Many kinds of traffic improvements are essential, but there are few which promise the firm, long-range potentials of driver education in our high schools. Now, about one-fourth of the high schools provide a full course with practice driving in a dual-control car. There is still a long way to go before

every high school student is given this practical and essential opportunity."

### Supply of Science Teachers Now Alarmingly Low

WASHINGTON, D.C.—The decrease in the number of new teachers graduated by the colleges each year since 1950 is greater in science than in any other field, according to an article in the September issue of the *Science Teacher*, published by the National Science Teachers Association. The 1953 yield will be only about 4600 new teachers for the entire nation—49 per cent under the class of 1950. Author of the article is Ray C. Maul, associate director of the research division of the N.E.A. This decrease, Dr. Maul said, comes at a time when there is nationwide concern over current and future supplies of scientifically trained personnel and when the number of children to be educated in the schools is rapidly increasing.

In the light of this situation, the association has encouraged its Future Scientists of America Foundation to work actively and cooperatively with other groups that are equally concerned about the inadequate and dwindling supply of science teachers and its effect on the pool of students from which future scientifically trained personnel must come.

### Kerry Smith Named Secretary of Association for Higher Education



WASHINGTON, D.C.—The new executive secretary of the Association for Higher Education, a department of the N.E.A., is George Kerry Smith of

the U.S. Office of Education. He succeeds Francis H. Horn, who resigned his N.E.A. post recently to accept the presidency of Pratt Institute in Brooklyn, N.Y.

Dr. Smith has been director of the reports and publications division of the U.S.O.E. for the last decade. He currently is president of the Educational Press Association of America. His earlier experiences in higher education include several teaching posts at Teachers College, Columbia University, and West Georgia College, Carleton, and teaching assignments at the College of Charleston, Charleston, S.C., New

**POUR 'EM... *don't* PEEL 'EM**



**WITH THE NEW**

**Univex  
Vegetable  
Peeler**



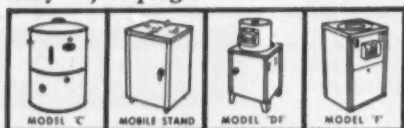
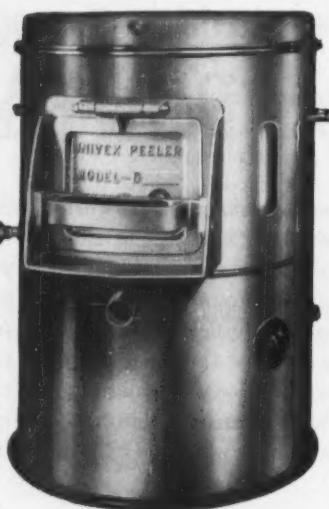
**STAINLESS STEEL**

All You Do Is Pour 'Em In — Set The Timer — And That's All. In one minute, out they come — all peeled.

#### FOUR SUPERIOR POINTS

- Stainless steel construction throughout
- Automatic Timer
- Unconditional 2-year guarantee of peeling disc
- Powerful motor with overload protection

On portable models there is no installation — no traps necessary — just plug in.



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INDUSTRIES**  
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**MODEL D  
PORTABLE  
\$139<sup>95</sup>**

**Standard Model C  
\$107.50**

**LUDMAN****Auto-lok**  
AUTOMATIC LOCKING**WINDOWS**  
ALUMINUM OR WOODLaw School Building University of Arkansas,  
Fayetteville, Arkansas, Architect, Paul Young, Jr.**For pleasant  
classroom****Environment**

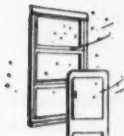
In modern school construction, windows that make maximum use of natural light and natural ventilation, are an important factor in achieving pleasant classroom environment.

Ludman - - world leader in the field of window engineering - - has developed special Auto-Lok windows to help you create this kind of classroom environment.

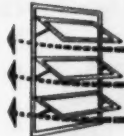
Ludman Auto-Lok windows make it possible for you to enjoy all the advantages of natural light and natural ventilation yet close with a degree of weather tightness unobtainable in any other window.

Ludman windows feature the patented Auto-Lok principle of operation that makes them seal tighter than any window made. They close ten times tighter than generally accepted standards . . . seal like a refrigerator. This means your architect can design window-walls of light that take full advantage of light and natural ventilation yet provide weather tight closures. With Auto-Lok windows you can enjoy classroom environment that will be pleasant and an inspiration to students and teachers alike.

For illustrated literature, write - -

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NORTH MIAMI, FLORIDA

**WEATHER TIGHTNESS**  
The tightest closing window ever made. Patented Auto-Lok design compresses weatherstripping around each sash - - seals it like a refrigerator. "Cold Zones" are eliminated.



**DRAFT-FREE VENTILATION**  
Plenty of fresh air - - even when it rains! Auto-Lok design lets you regulate ventilation for classroom comfort . . . enjoy draft-free air circulation.



**EASY TO OPERATE**  
Auto-Lok's patented principle of operation makes these the easiest of all windows to operate. No effort is required to open or close even the largest window.

**LUDMAN LEADS THE WORLD IN WINDOW ENGINEERING**



## NEWS...

Haven College, New Haven, Conn., and American University, Washington, D.C. Previously he had taught in the elementary and secondary schools of Des Moines, Iowa, and Madison, N.J.

As executive secretary of the Association for Higher Education, Dr. Smith also will be the editor of its regular publications *College and University Bulletin* and *Current Issues in Higher Education*. He also will direct the National Conference on Higher Edu-

cation, the largest annual gathering of college and university representatives in the United States.

### M. J. Rand Appointed Assistant Supt. at Paramount, Calif.

M. J. Rand, co-author with Lambert W. Baker of the article in September, "Here's How a Small School Can Publish an Annual Report," (p. 53) should have been identified as assistant superintendent of the South Bay Union Elementary School District at

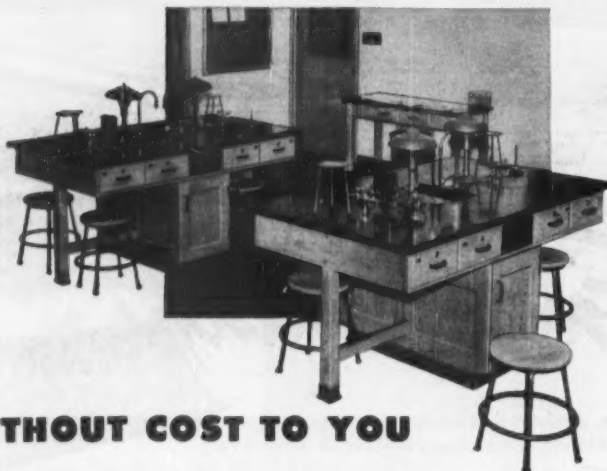
Palm City, Calif., rather than Redondo Beach.

Dr. Rand recently accepted appointment as assistant superintendent at Paramount, Calif. He had been assistant superintendent of the South Bay district for the past year. From 1950 to 1952 he had been guidance-attendance coordinator for the San Diego county schools.

For 15 years previously, he had served the San Diego city schools as junior college counselor and teacher, veterans' counselor, elementary principal, and junior-senior high school teacher.

Dr. Rand described his proposals for a handbook on policies and procedures for school districts, based on his doctoral dissertation, in the October 1952 issue of *The NATION'S SCHOOLS*.

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## ABOUT PEOPLE

### SUPERINTENDENTS . . .



Allan S. Hurlburt

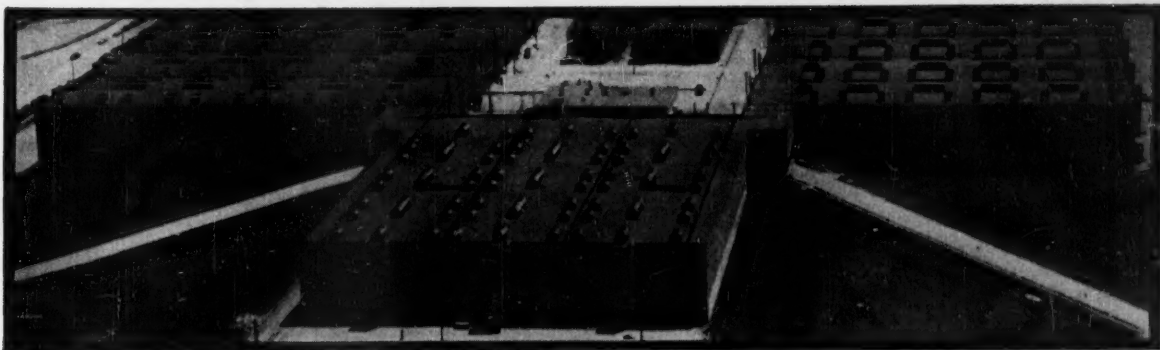
Allan S. Hurlburt has been named assistant superintendent in charge of instruction for the state of North Carolina. Dr. Hurlburt is the former director of the bureau of educational research and services at the University of North Carolina and a director of the C.P.E.A. for the state. He will coordinate the supervisory services of the North Carolina Department of Education now being offered by several different divisions.



Paul H. Rehms

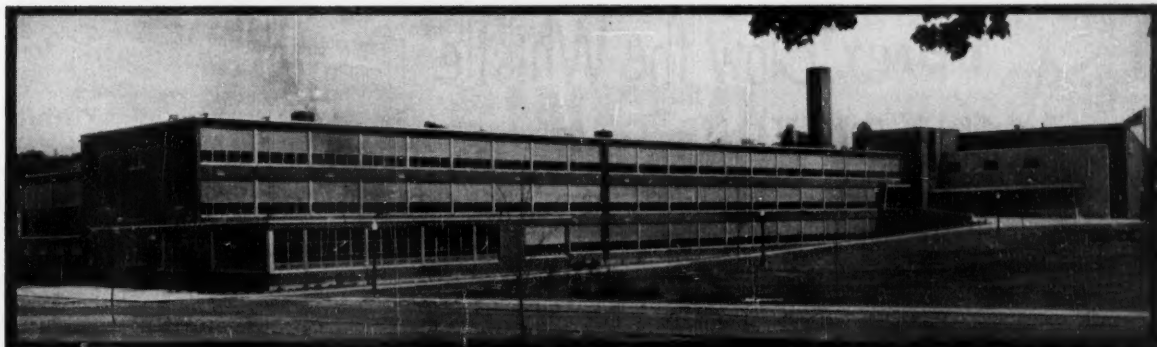
Paul H. Rehms, immediate past superintendent at Portland, Ore., will remain in the schools as a consultant on problems of teacher supply and procurement. Dr. Rehms resigned as superintendent on the advice of his physician. Since 1941 he has been a member of the editorial advisory board of *The NATION'S SCHOOLS*.

Sherman G. Eyre, former superintendent for Garfield County, Utah, is now superintendent at Logan, Utah. Mr. Eyre succeeds H. Grant Vest, now



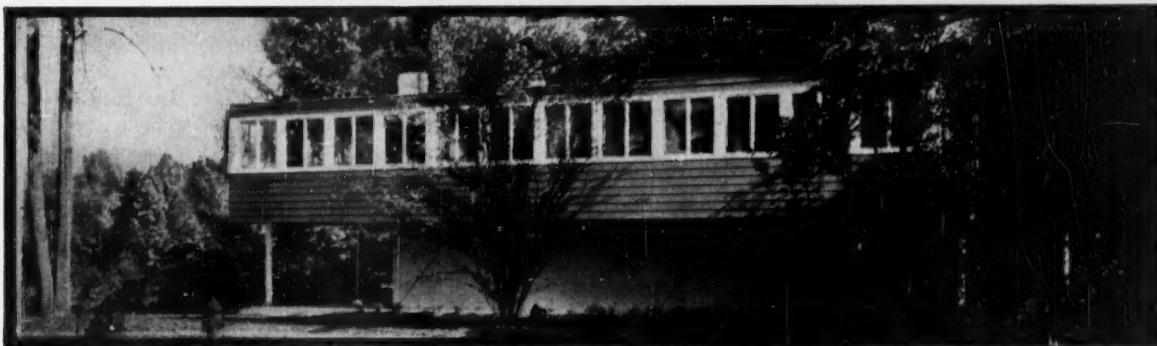
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*The centers of education...*



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*The house around the corner...*

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To obtain the ideal roof for your school, contact Barrett now. A Barrett representative will be happy to study your needs and advise on specifications.

It will pay your community to take advantage of Barrett's unmatched experience in roofing. When you buy a Barrett "SPECIFICATION" Roof, you are assured of a roof correctly applied by a Barrett Approved Roofer using unexcelled roofing materials, plus in-

spection by a trained Barrett inspector. Upon completion, you get a Bonded Guaranty covering your roof for periods up to 20 years. Barrett "SPECIFICATION" Roofs regularly outlast their bonded periods, giving matchless service under all weather conditions.



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## NEWS...

commissioner of education for the state of Colorado.

Eugene G. Burnkrant, superintendent at Plymouth, Wis., for the last four years, is now superintendent at Ashland, Wis. His successor at Plymouth is Eldon M. Amundson, former supervising principal at Waterloo, Wis.

Raymond E. Clausen, superintendent at Viroqua, Wis., resigned to accept the superintendency at Wisconsin Rapids, Wis., succeeding Floyd Smith, who retired. Mr. Clausen's position at Vir-

oqua has been accepted by Donald E. Dimick, supervising principal at Mount Horeb, Wis. D. A. Kobs, supervising principal at Spencer, Wis., succeeds Mr. Dimick at Mount Horeb.

John W. McFarland is now superintendent of schools at Vernon, Tex., succeeding J. B. Golden. For the last two years Dr. McFarland has been assistant professor of curriculum and instruction at the University of Texas and coordinator of the one-week work conferences for school leaders spon-

sored by the Texas Association of School Administrators. Formerly Dr. McFarland was principal of Ball High School, Galveston, Tex.

Herman J. Kramer, superintendent at Wapato, Wash., since 1944, is now superintendent at Aberdeen, Wash.

Neal C. McClure has been appointed superintendent at Richland, Wash. Formerly he was superintendent at Coville, Wash.

John P. Milligan, superintendent at Atlantic City, N.J., has been appointed assistant commissioner of education and director of the Division



John P. Milligan

Against Discrimination for the state of New Jersey. Dr. Milligan will assume office on December 1, succeeding Joseph L. Bustard, who died in June.

Herbert C. Clish has accepted another four-year contract as superintendent at San Francisco, where he has served for eight years. The new contract was signed at an increased salary level—\$25,000.

Joseph M. Beckman, assistant superintendent in charge of the school building program at Cincinnati, has been appointed administrative assistant to the superintendent.

Allen R. Moore has been named superintendent of the high school district at Cicero, Ill., succeeding William P. MacLean. Mr. Moore has served as acting superintendent for more than a year. He had been assistant superintendent previously.

R. Guild Gray is the new superintendent at Las Vegas, Nev. For the last year, Mr. Gray had been director of secondary education for Contra Costa County, California. Appointed assistant superintendents at Las Vegas were J. Harold Brinley and George E. Harris.

Wayne T. Gustafson, formerly supervising principal at Hammond, Wis., has been appointed supervising principal at Osceola, Wis.

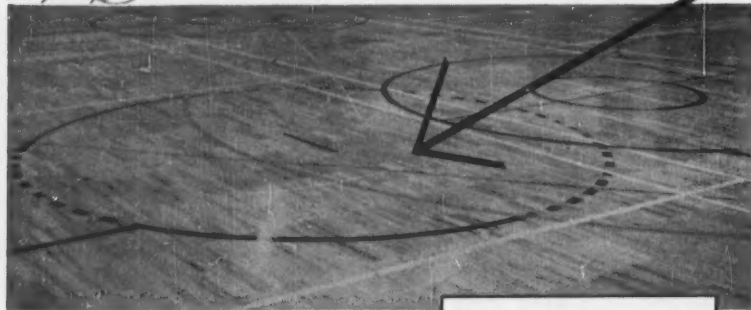
John F. Daily, former teacher at Wisconsin Dells, Wis., is now supervising principal at Benton, Wis.

Helen Schroeder succeeded Frank V. Heck as superintendent for Brown County, New Ulm, Minn. Mr. Heck resigned to take a position at New Ulm. Mrs. Schroeder is a former teacher in Brown and Nicollet counties.



## DON'T "Blow the Whistle" ON YOUR GYM!

Remember—the games are played HERE!



It's not the pretty wall and ceiling decorations that take the beating in your gym—it's the floor! That's why—if you want the most for your dollar—you'll be wise to budget for Robbins IRONBOUND\* CONTINUOUS STRIP\* gym flooring and let the wall and ceiling doo-dads fit the financing as they will.

The IRONBOUND CONTINUOUS STRIP principle insures the ideal playing surface... that never "plays dead"... that stays alive with just the right amount of spring for fast action without leg-strain.

### And here's why:

Over the slab concrete base of your gym floor Robbins places a layer of mastic, then a layer of cork, then mastic again and—topping it all—Northern Hard Maple which through years of use has proven itself the ideal flooring.

Only authorized Robbins contractors lay Robbins IRONBOUND CONTINUOUS STRIP flooring—for your protection. Write for the name of your nearest contractor to Dept. N112, Reed City, Michigan.

Write us for the location of an IRONBOUND CONTINUOUS STRIP-floored gym near you!

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World's largest maple flooring manufacturer

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### See what a ROBBINS FLOOR can mean to you!

The finest Northern Maple obtainable is laid with a saw-toothed steel spline driven into grooves in the ends of each strip. Thus, your floor is locked snugly in place... there's no shifting... the surface remains smooth.

And Robbins Northern  
Hard Maple Costs No More  
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# Treat Your Asphalt Tile Floors the New, Easy, Safe Way!

Now You Can Maintain Floors Daily  
the magic **HIL-SWEEP** way  
and Watch Dust and Dressing Vanish



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gives you  
all these  
advantages

1. Can be used with safety on Asphalt Tile and all other types of floors, also walls, furniture, woodwork, or any surface from which dust or loose soil is to be removed.
2. Sprayed or brushed on, it picks up dust particles—then evaporates, leaving no residue, providing a dust-free floor with renewed lustre.
3. Contains **NO** emulsified oil. Leaves no oily residue to darken, discolor, soften or bleed colors.
4. Will not soften wax film.
5. Will not decrease frictional resistance.
6. **NON-FLAMMABLE**—has *no* flash point yet will not freeze. Rags saturated with the solution will not burn, eliminates fire hazard in use or spontaneous combustion of mop in storage.
7. Won't load mop. After using, simply shake out the brush or cloth and it's ready to use again. Saves on laundry and dry cleaning bills.

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Show me how to "dust-up" the improved HIL-SWEEP way.  
Mail free information on magic HIL-SWEEP to:

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**NEW, IMPROVED**  
**Kewanee**  
**DISHWASHER**

**still only**  
**\$396**

(F.O.B. Kewanee, Ill.)



**STANDARD MODEL**  
 Washes well over 2000 dishes per hr.

People who best know efficient dishwashing operation — food dispensers of all kinds — suggested the improvements. Now . . . it's here — the new, improved Kewanee Dishwasher . . . still at the same low price!

#### MORE-FOR-YOUR-MONEY FEATURES

Adjustable Legs . . . Removable Front Panel . . . Larger Rinse Burner . . . More Efficient Motor Mounting . . . Hand-operated Flexible Hose (for Pre-wash Model) . . . Handier Faucet Mounting . . . Easy-access Thermostats . . . Cup Indentation for Switch.

#### EASIER . . . FASTER DISHWASHING

Dishes are placed in basket; put in wash compartment. Here, turbulent action of water thoroughly cleanses. After sanitization in 180° rinse water, dishes air-dry quickly!

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Without obligation, please send me latest literature on new Kewanee Dishwashers.

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## NEWS...

Evert W. Ardis, former superintendent at East Detroit, Mich., is the new superintendent at Ypsilanti, Mich. He succeeds the late Ernest H. Chapelle.

Paul Runyan has been named supervising principal of the Saltsburg Joint High School, Saltsburg, N.Y. He succeeded Glenn Turner.

Charles I. Swain, formerly superintendent at Cannelton, Ind., has accepted a similar position at Batesville, Ind.

John Bacon, superintendent at Empire, Mich., for the last 13 years, is the new superintendent for Leelanau County, Leland, Mich.

Karl E. Whinnery has resigned as superintendent at Sandusky, Ohio, and will become director of the Sandusky branch of Bowling Green State University. Succeeding him is the former assistant superintendent, Carl L. Mackey.

John J. Forester has been named superintendent of Uniondale School District 2, Hempstead, N.Y. Dr. Forester had been supervising principal of the district since November 1951.

E. S. Castor has resigned as superintendent at Rochester, Ind. His successor is Raymond Julian, former superintendent for Cass County, Indiana.

Charles D. Veldhuis, superintendent at Hudsonville, Mich., since 1939, has retired after 39 years as an educator.

Joseph H. Colby has been named superintendent at Capac, Mich. Prior to accepting this appointment, Mr. Colby had held a similar position at Port Austin, Mich.

Lawrence Pierce, recently named superintendent at Shoals, Ind., succeeded Ernest Asbell, who has become superintendent for Martin County, Shoals, Ind.

Charles A. Lindsey has been named superintendent at Nocona, Tex., succeeding E. W. McPherson.

Myron Boehm has succeeded R. P. Minneman as superintendent at Sunman, Ind.

William C. Gohl has been appointed superintendent at Topeka, Ind.

Albert Seeliger, superintendent of the Consolidated B elementary schools at Fallon, Nev., has been named superintendent at Carson City, Nev. The position at Fallon has been filled by Herbert Chiara.

John N. Willmott has been appointed to the newly created position of administrative assistant at Garden City, N.Y.

**KYS-ITE**  
 molded plastic  
 trays have up  
 to 5 times the  
 strength of  
 ordinary plastics



Practically indestructible and quiet, these lightweight, easy-to-handle trays are used by more and more of the country's leading schools and colleges. Kys-ite trays won't shatter; they're tough to chip or damage with even the roughest handling. Their smooth, hard finish is mar and scratch-resistant . . . and so easy to clean! Can be sterilized indefinitely without dimming their lustrous red or brown colors or warping. Available in 10 sizes.

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*Flexibility*

- Attractive modern design  
large roomy bookbox (18" x 24")  
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available with lifting lid bookbox.
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heavy birch plywood bonded with hard maple  
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standard table height 29".
- Swivel chair with 3" height adjustment  
comfortable saddled seat  
posture forming movable back  
available with casters.



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marring and scratching.  
Engineered color  
harmony "Suntan."

"No One Ever Regretted Buying Quality"

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NORTH MANCHESTER, INDIANA



## NEWS...

Erling Johnson, superintendent at Mankato, Minn., has been elected president of the Minnesota Association of School Administrators. Other officers elected were: vice president, Walter Richardson, North St. Paul; secretary, Ray Stensvad, Two Harbors, and treasurer, C. P. Mickelson, Canby.

Conan S. Edwards, supervising principal at Port Edwards, Wis., has accepted the superintendency at Ripon, Wis., succeeding the late R. H. Licking. Named Mr. Edwards' successor

was Gerald Eyler, former supervising principal at Green Lake, Wis.

Ray Dennis, a teacher at Corunna, Mich., has been named superintendent there.

John Moehle resigned his position as coordinator of civil defense in New York State schools to become supervising principal of the Onteora Central School, Phoenicia, N.Y.

William J. Edgar has been appointed superintendent of School Union 34, New Salem, Mass.

C. E. Jones, acting superintendent at Beloit, Wis., during the last year, has now been appointed superintendent there.

William Garrett, principal at St. Ignace, Mich., for the last four years, has become superintendent at Gwinn, Mich.

Zed L. Foy, superintendent of Boise, Idaho, since 1940, has gone to Tel Aviv, Israel, on a two-year assignment as chief of the division of education, under the Point Four program.

Grover Brown, superintendent for Brown County, Nashville, Ind., has retired. Succeeding him will be Claude Neidigh.

Leon A. Kaminski, principal of the Theodore Roosevelt School, Sloan, N.Y., has been appointed superintendent at Sloan.

John R. Hughes is the new superintendent at Baxter Springs, Kan. Mr. Hughes had been at Oswego, Kan., since 1947, serving in a similar capacity.

A. J. Renaud has succeeded the late Harry G. Doeringsfeld as superintendent for Franklin County, Hampton, Iowa. Previously Mr. Renaud had been elementary department principal at Hampton.

Arlo Gould, former teacher at Ithaca, Mich., is now superintendent at Crystal, Mich.

Harold Plank, high school principal at Denison, Iowa, is the new superintendent at Mount Vernon, Iowa, succeeding Melvin Sikkink.

J. W. Breck, former high school principal, has been elected superintendent at Shelbyville, Ind. He succeeds William Loper, who has retired.

Robert C. Wilson has assumed his duties as superintendent at Sanger, Tex., succeeding C. D. Allen. Mr. Wilson went to Sanger from Lefors, Tex., where he was superintendent four years.

Floyd A. Conner has been appointed superintendent at Sulphur Springs, Iowa, succeeding Harold A. Simmons. Mr. Conner has taught at Lake City, Iowa, for the last four years.

Clarence E. Robbins is the new superintendent at Plainfield, Ind. He formerly served in a similar capacity at Spencer, Ind., where he has been succeeded by Charles L. Sharp.

Ray Elsea has succeeded Harry Ewing as superintendent at Cooper, Iowa.

Hyacinth Roth has been named superintendent at Spearville, Kan. Mr.

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*smoothest  
playgrounds*  
your school can buy



**SMOOTH** Because you screed and squeegee it on—cold! (You make important labor savings here, too.)

**SAFER** Because Walk-Top surfaces are level, non-abrasive. All-weather surfaces are usable the year round.

**ECONOMICAL** Because they last; because maintenance cost is virtually eliminated. Red, green or black weather-tast colors.

**ACCEPTED** Over 5,000,000 square feet in 4 major cities this year—millions more in individual school districts. Many school boards consistently specify "Walk-Top Finish" on playgrounds, parking areas, driveways.

**WALK-TOP** is ideal for resurfacing—durable, resistant, economical.



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300 BUSH STREET  
SAN FRANCISCO 4, CALIFORNIA

Providence 14, R. I. Perth Amboy, N. J. Baltimore 3, Md. Mobile, Ala. Columbus 15, Ohio Tucson, Arizona Seattle, Wash.  
Helen Hugo 2, La. St. Louis 17, Mo. Inglewood, Calif. Oakland 1, Calif. Portland 7, Ore. Washington 6, D. C. San Juan 23, P. R.

## Here's important news about School Sound Systems



Equipped to serve up to 60 rooms, RCA Consolette mounted on matching console base, complete with AM-FM radio and phonograph turntable.

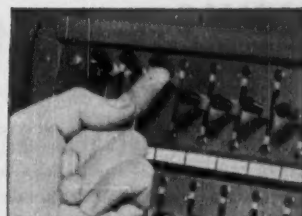
## Streamline administration these 4 ways with RCA's Full-Function Consolette

Here's the answer to a thousand-and-one administrative details—the RCA Full-Function Consolette. Use it to distribute administrative information, instruction, music, radio broadcasts, and school entertainment to any list of rooms in your school. Use it to give yourself more time for important administrative affairs. It's faster than holding an assembly, more effective than distributing a memo. And it's built to perform with RCA superiority.

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**RADIO CORPORATION of AMERICA**  
EDUCATIONAL SERVICES, CAMDEN, N. J.



**1. Complete roster at your fingertips**—Here's your master list of rooms, ready for selection—singly or in combination. Set up any distribution list you want in seconds.



**2. Add extra channels as your needs expand**—Your RCA Consolette grows as your school expands. Keyboard panels can be added at any time to serve as many as 60 rooms.



**3. Immediate switchover for emergency instructions**—To issue emergency instructions or general announcements, turn master switch to "all" position. Give explicit instructions—"talk" your students to safety.



**4. May be equipped with intercom system**—Your RCA Consolette can be equipped to provide two-way conversation with any room in your school at the flip of a switch.

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Please send me information on the following RCA Sound Equipment:

☐ RCA Consolette for as many as 60 rooms. ☐ RCA Public Address Systems for gymnasiums, auditoriums, playing fields.

Name \_\_\_\_\_ Title \_\_\_\_\_

School \_\_\_\_\_

Address \_\_\_\_\_

City \_\_\_\_\_ Zone \_\_\_\_\_ State \_\_\_\_\_

## NEWS...

Roth went to Spearville from Victoria, Kan., where he had been superintendent for nine years.

Norbert M. Daul, former high school principal at Crystal Falls, Mich., has been appointed superintendent at Alpha, Mich.

Harry Neimeyer has been named superintendent at Middletown, Ind., succeeding J. Earl Bales.

Charles T. Cowan, superintendent at Saranac Lake, N.Y., is the new superintendent at Northport, N.Y. Dr.

Cowan succeeds Roy R. Waite, who resigned recently.

Orzo T. Premo, supervising principal at Milltown, Wis., has accepted the supervising principalship at Cornell, Wis. He was succeeded at Milltown by Elroy C. Rundle, former supervising principal at Melrose, Wis.

Joseph H. Griffin, supervising principal at Reedsville, Wis., has been appointed to a similar position at Kewaunee, Wis. John E. Worachek is Mr. Griffin's successor.

## IN THE COLLEGES...



B. L. Dodds

B. L. Dodds, director of the division of education and applied psychology, Purdue University, will take office on November 1 as dean of the college of education, University of Illinois.

Prior to going to Purdue, Dr. Dodds was research assistant and instructor at Teachers College, Columbia University. At Illinois he will succeed Willard B. Spalding, who resigned in December 1952.

Raymond M. Mosher, dean of educational services at San Jose State College, San Jose, Calif., has been granted a one-year leave of absence to assume the duties of interim president at Eastern Washington College of Education, Cheney, Wash. William G. Sweeney, chairman of the education division at San Jose College, has been appointed acting dean.

John D. Moseley, executive director of the Texas Legislative Council since its inception in 1950, has resigned to accept the presidency of Austin College, Sherman, Tex.

George W. Hoffman, assistant professor of education at the University of Pittsburgh, has been named to succeed Claire A. Anderson as director of the University of Pittsburgh Johnstown Center, upon Mr. Anderson's retirement. Mr. Hoffman took over his new duties October 15.

Eugene A. Waters and Andrew D. Holt have been named vice presidents of the University of Tennessee, Knoxville. Dr. Waters, who is chairman of the commission on research for the Southern Association of Colleges and Secondary Schools, has been dean of the university's graduate school since 1948. Dr. Holt, a former president of the National Education Association, has been administrative assistant to the president since 1950. Previously he had been executive secretary of the Tennessee Education Association.

## DEATHS...

Manley E. Irwin, supervising director of instruction at Detroit, died recently of a heart attack.

Richard M. Moll, former assistant superintendent for Berks County, Pennsylvania, died in August—a week after his retirement.

## IN SCHOOL THE KIDS

ARE YOUR RESPONSIBILITY...

# Keep 'em healthy



Wherever children congregate, use Korex Germicidal Cleaner and protect them from disease or infection. Use triple-action Korex for floors, walls, fixtures... any surface contaminated by water. It cleans, disinfects and deodorizes in one operation. Save time, work and worry... put economical Korex on guard. Sample on request.

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triple action **CLEANER** kills germs



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- ☐ Yes, please send "101 Hints on Better Floor Care" Booklet  
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Free  
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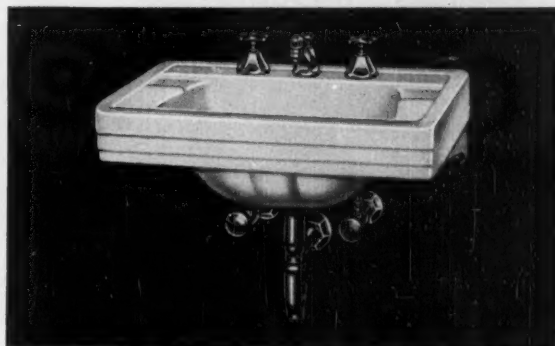
ADDRESS.....



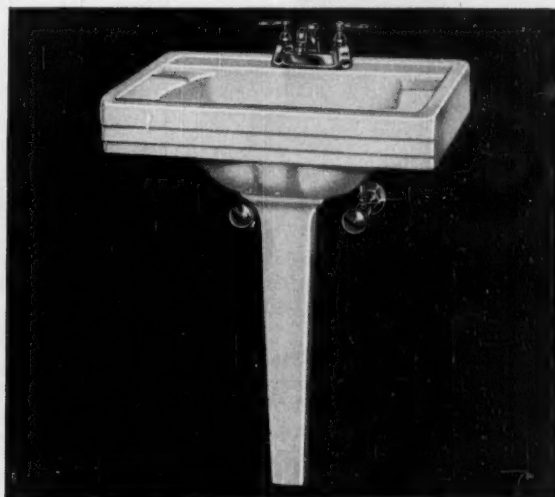
# New-design American-Standard lavatories ideal for installation in all types of schools

■ New-design American-Standard lavatories offer greater beauty, convenience and ease of maintenance for school toilet rooms. They are being widely acclaimed as the best-looking fixtures ever made. New bowl design makes the lavatories unusually convenient to use. And smooth styling makes them easy to clean, cuts maintenance time.

In addition to the three lavatories shown, American-Standard offers a wide variety of plumbing fixtures suitable for all types of schools, from kindergartens to colleges. For more information on them, see your architect or your plumbing contractor. **American Radiator & Standard Sanitary Corp.,** P. O. Box 1226, Pittsburgh 30, Pa.



**OFF-THE-FLOOR** New Buena lavatory is especially suitable for elementary school use because it can be installed at any height most convenient for the children. The Buena is made of genuine vitreous china in a variety of colors. Fittings are non-tarnishing Chromard.



**BOTH THE BOWL AND GRACEFUL LEG** of the New Hibben lavatory are made of genuine vitreous china that retains its smart good looks indefinitely. A variety of combinations of smooth-working, long-lasting fittings is available for each of the lavatories shown.



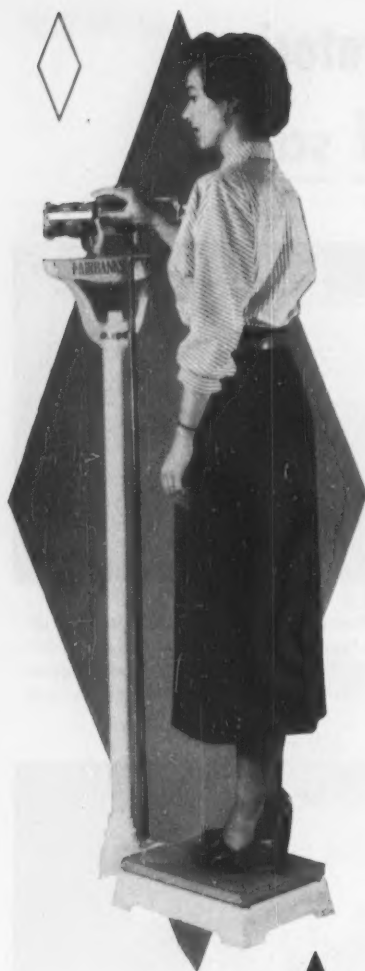
**THIS ILLUSTRATION** shows the new-design bowl of American-Standard lavatories. It is wide at the front to allow plenty of space for washing, yet tapers to the rear to leave room for large, cast-in soap dishes. Overflow is concealed in the front of the fixture to preserve unbroken smoothness of design.

## AMERICAN-Standard



*Serving home and industry*

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**Durable...**

**Accurate...**

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You can be sure of these dependable features when your health scales bear the name *Fairbanks-Morse*—first name in scales! This is the new Model 1265, noted for its accuracy... durability... smart appearance... and easy-to-use features—you get trouble-free performance over the years. Fairbanks, Morse & Co., Chicago 5, Illinois.

**FAIRBANKS-MORSE**  
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SCALES • PUMPS • DIESEL LOCOMOTIVES AND ENGINES  
ELECTRICAL MACHINERY • RAIL CARS • HOME WATER  
SERVICE EQUIPMENT • FARM MACHINERY • MAGNETOS

## COMING EVENTS

### OCTOBER

26-29. Adult Education Association of U.S.A., New York City.  
29-30. Educational Records Bureau and American Council on Education, 18th educational conference, New York City.

### NOVEMBER

1-4. International Council for Exceptional Children, N.E.A., Portland, Ore.  
8-14. American Education Week.  
10-13. American School Food Service Association, seventh annual conference, Boston.  
13-14. Minnesota Association of School Administrators, Minneapolis.  
15-18. National Conference on Driver Education, N.E.A. Commission on Safety Education, East Lansing, Mich.  
22-24. Northwest Conference on Administrative Leadership Serving Community Schools, American Association of School Administrators and N.E.A. Department of Rural Education, Spokane, Wash.  
23-28. American Vocational Association, 47th annual convention, Chicago.  
26-28. Southern Region, United Business Education Association, N.E.A., Birmingham, Ala.  
26-28. National Council for the Social Studies, N.E.A., Buffalo, N.Y.  
30-Dec. 3. National School Service Institute, Chicago.

### DECEMBER

2-4. Mid-Century Conference on Resources for the Future, Washington, D.C.

### 1954

### FEBRUARY

11-13. American Association of Colleges for Teacher Education, N.E.A., Chicago.  
11-13. Department of Elementary School Principals, N.E.A., Atlantic City, N.J.  
13-18. American Association of School Administrators, N.E.A., Atlantic City, N.J.  
15-18. Department of Rural Education, N.E.A., Atlantic City, N.J.  
20-24. National Association of Secondary-School Principals, N.E.A., Milwaukee.

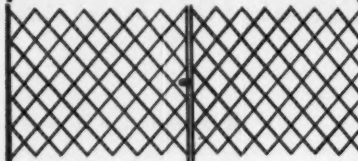
### MARCH

2-5. Department of Audio-Visual Instruction, N.E.A., Chicago.  
4-6. National Conference on Higher Education, Association for Higher Education, N.E.A., Chicago.  
7-12. Association for Supervision and Curriculum Development, N.E.A., Los Angeles.  
26-31. Music Educators National Conference, N.E.A., Chicago.

### APRIL

1-3. National Science Teachers Association, N.E.A., Chicago.  
18-23. Association for Childhood Education International, St. Paul.  
25-27. Midwest Conference on Administrative Leadership Serving Community Schools, American Association of School Administrators and N.E.A. Department of Rural Education, St. Paul.

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### We also manufacture—

IRON — WIRE — EXPANDED METAL  
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The NATION'S SCHOOLS

Now you see the machines!

Now you don't!



**New double-purpose table solves space problems...makes teaching easier**

Many sewing classrooms . . . like the one you see here at the Abbett School in Fort Wayne, Indiana . . . are installing the new SINGER Combination Sewing and Cutting Table.

Teachers call it "the most practical piece of sewing-class equipment ever designed." See how it can save time and work for you—make *your* classroom more pleasant, more efficient.

## The new SINGER Combination Sewing and Cutting Table

**Provides machines for two students, work space for two more!**

Now—even if classroom space is limited, you can have *two* machines for every four students!

No need for a separate row of space-consuming cabinets. No need for the class to be constantly shifting and shuffling around. The new SINGER\* Table holds two full-sized SINGER Machines—and at the same time provides work space for two other students.

**Converts to a smooth-surface cutting table in a jiffy!**

You don't have to use up space with separate cutting tables, either!

Simply lower machines into SINGER Table—slip removable panels back into place—you have a smooth, continuous surface. (An extra blessing if the

room is used for other classes or study hall.)

Developed at the suggestion of Dr. Anna M. Dooley, representing the New York City Board of Education—this new table meets *every* sewing room need.

**Gives you all these de luxe features:**

- 5-ply construction. Durable Formica or Masonite top. Solid birch legs.
- 4 handy drawers.
- Built-in knee levers.
- Dustproof shields which completely enclose machines when they are lowered into table.
- Tamper-proof locks on panels.
- Provision for adding automatic switch to cut off power when machines are lowered.
- Size 60" x 42" x 30."

**Available** with any of the 3 regular SINGER\* Sewing Machine classroom heads—at a *special school discount*.



**\* DON'T BE MISLED.** SINGER sells and services its products only through SINGER SEWING CENTERS, identified by the Red "S" Trade Mark on the window and listed in your phone directory only under SINGER SEWING MACHINE CO.

**Free Folder on Request.** SINGER will send you, or any member of your home economics department, a folder giving complete specifications of the table and suggested classroom layouts. Just mail this coupon.

**SINGER SEWING MACHINE CO.**  
Educational Dept., 149 Broadway, New York 6, N. Y.

Please send folder giving details about Combination Sewing and Cutting Table, and showing suggested classroom layouts.

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## SINGER SEWING CENTERS

THERE'S ONE NEAR YOUR SCHOOL

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## THE BOOK SHELF

Printed publications of interest to school administrators are listed as received.

### ADMINISTRATION

**Turnover and Demand in Public School Administration.** By William T. Carlisle. A study to determine the amount and causes of turnover of school administrators and possible relationships between turnover and such factors as salary, term or tenure provisions and the size of the school district. C.P.E.A., Middle Atlantic Region, Teachers College, Columbia University, New York. Pp. 30.

### ADULT EDUCATION

**Development of Adult Education in California.** By George C. Mann, chief, bureau of adult education, California State Department of Education, and J. Wilson Getsinger, supervisor, business education, and vice principal of Vocational High School, San Diego public schools. Bulletin of the California State Department of Education, June 1953. California State Department of Education, Sacramento. Pp. 87.

### AUDIO-VIDEO

**United Nations Films.** The films listed describe the structure, functions and activities of the United Nations and its specialized agencies. Department of Public Information, United Nations, New York. Pp. 22.

### CURRICULUM

**Look to the Sky.** Pictorial booklet for use in primary grades. First publication from the

program for producing instructional materials in aviation education by the National Aviation Education Council, 1115 17th St., N.W., Washington 6, D.C. Pp. 31. 30 cents.

**Our Moral and Religious Resources.** A guide prepared for use of groups and classes that wish to consider the moral and religious resources of the nation. Includes questions and references. Commission on Religious Organizations, National Conference of Christians and Jews, 381 Fourth Ave., New York 16. Pp. 72. 25 cents.

### EVALUATION

**An Exploratory Measurement of Individualities of Schools and Classrooms.** University of Illinois Bulletin, June 1953. An attempt to measure differences in classrooms as a means of characterizing differences of school systems. Descriptive measurement of the institution, not the learner or the product of the educative process. By Francis G. Cornell, Carl M. Lindvall, and Joe L. Saupe, Bureau of Educational Research, College of Education, University of Illinois, Urbana, Ill. Pp. 71.

### GUIDANCE

**Intraclass Grouping in the Elementary School.** By Mary Clare Petty. Summary of a study made of the Casis School's practices in the special education of exceptional children. University of Texas Press, Austin 12. Pp. 183. \$2.

**Studying Children and Training Counselors in a Community Program.** Second of a series of reports on the work of a Community Youth Development Program sponsored by the Committee on Human Development of the University of Chicago. University of Chicago Press, 5750 Ellis Ave., Chicago 37. Pp. 136. \$1.50.

**Thoughts Along the Way.** By Walter E. Myer, founder and director of Civic Education Service, Washington, D.C. A collection of essays for youth dealing with developing character, personality, leadership and ideals. National Education Association, 1201 16th St., N.W., Washington 6, D.C. Pp. 224. \$2.

### HEALTH EDUCATION

**Suggested Responsibilities of the Administrator, the Teacher, the Medical Adviser, the Nurse for the Health of School Children.** Prepared by California State Joint Committee on School Health, representing the state department of education and state department of public health. California State Department of Education, Sacramento. Pp. 19.

**Narcotics and Youth.** By Hubert S. Howe, M.D., American Neurological Association. Underscores public education as a weapon against the spread of illicit drug use. The Brook Foundation, Inc., 51 Lakeside Ave., West Orange, N.J. Pp. 40. 50 cents.

### INTERNATIONAL EDUCATION

**Progress of Literacy in Various Countries.** The first known comparative study of world illiteracy and progress. UNESCO Monograph on Fundamental Education VI. International Documents Service, Columbia University Press, 2960 Broadway, New York 27. Pp. 254. \$1.50.

### PUBLIC RELATIONS

**Minnesota Boy and the Rest of the World.** Public relations pamphlet which takes the reader behind the scenes in the educational experience of a child and follows his progress from childhood to maturity. Minnesota Education Association, 2429 University Ave., St. Paul 14. Pp. 24. 25 cents.

### SAFETY EDUCATION

**They Found a Way.** Report of the National Conference on Safety Education in Elementary Schools, August 1952. National Commission on Safety Education, N.E.A., 1201 16th Street, N.W., Washington 6, D.C. 35 cents.



## "We cut our towel bill IN HALF!"

A school district in Texas, with an enrollment of close to 5,000 pupils, installed MOSINEE Zip-Towels and Sentinel Cabinets throughout the district.

The district Business Manager says: "After using Mosinee towels and Sentinel cabinets for three years we find that our towel consumption has been cut in half."

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**MOSINEE**

*Sulphate Towels*

PREP-TOWLS • ZIP-TOWLS • TRIM-TOWLS • TURN-TOWLS • ROLTOWLS • BATH-TOWLS



Maximum light distribution at low cost is achieved by installation of  $\frac{1}{8}$ " Mississippi Pentecor glazed in vertical sidewall sash. Glazier: Rainbow Glass Co., St. Louis, Mo.

LET THERE BE  
*Light*  
...and plenty of it!

Brighter classrooms mean better pupils... and architect Kenneth E. Wischmeyer (AIA) has taken advantage of all the excellent properties of Pentecor Glass in the new, modern Clopton High School, Clarksville, Missouri. Installation of Pentecor, translucent, light diffusing glass by Mississippi, provides the maximum in light distribution... floods entire classrooms with plenty of undistorted, softened, natural light. It makes classrooms and gymnasium appear more cheerful and spacious... makes seeing tasks easier, aids concentration, helps make learning fun. In this modern structure, a vision strip in two lower lights avoids lack of visual contact with outdoors—contributes to an "open area" feeling.

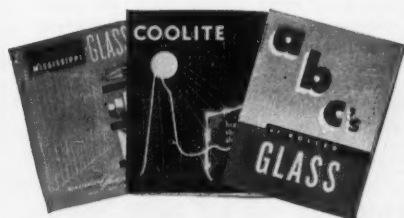
Give your students brighter prospects when you build or remodel. See how figured glass can add beauty and utility to your interiors and exteriors... dispel shadows... help protect precious young eyes. Mississippi constantly tests its patterns for proper school lighting qualities in its experimental classrooms. The results of this research and the recommendations of our technicians are available to you to help solve your glazing problems. Specify glass by Mississippi.



Clopton High School, Clarksville, Mo., Architect: Kenneth E. Wischmeyer, St. Louis, Mo., Contractor: Brockmeyer Construction Co.



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Construction of selected Appalachian kiln-dried Beech. Desk units with mortise and pegged tenon; chairs with spiral-grooved dowels and rigidly glued corner blocks. In Natural, Warmtone, or School Brown. Line also includes Movable Chair Desks, Tables, and Tablet Arm Chairs.

Write for name of authorized distributor in your state.

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## Less eye strain, better work

"LPI fixtures installed on your engineering recommendations in our classrooms are producing highly gratifying results. We believe the lighting improvement will yield dividends in reduced eye strain and better school work. We appreciate your practical help."



—G. A. Spidel, Chairman  
Waverly Consolidated School, Waverly, Nebr.

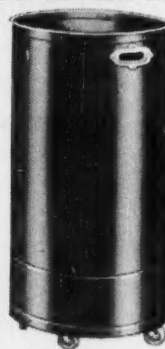
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HIGHLAND PARK, ILL.  
Specialists in Modern School Lighting

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For schools, colleges and institutions. A complete line of light, husky disposal units in high grade case-hardened FIBEROK. Utility cans have heavy steel tube and heavy gauge steel bottoms. Baskets have heavy steel tube top rings, steel bottoms and metal side seams. Straight or tapered. Your style and height ... send for details.



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Compact, rugged, light yet durable! Sturdy support strips; reinforced hardwood bottoms; self-lubricating rubber casters; all sizes and styles made to specifications. Wonderfully maneuverable around schoolrooms and stock-rooms. Write for complete details.

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Consult Mayline!

Our Drafting and Art tables have solid basswood top with steel end cleats, hardwood base. Roomy tool drawers are individually keyed. Drawing board compartment holds six boards, individually stored.

Other fine Mayline classroom equipment: Folding Tables, Woodworking Benches. Drawing Boards—plain and metal edge, Student drawing kits, Stools, T-Squares, Straightedges, Triangles, Triangular Scales, Erasing Shields, Drawing Tables.



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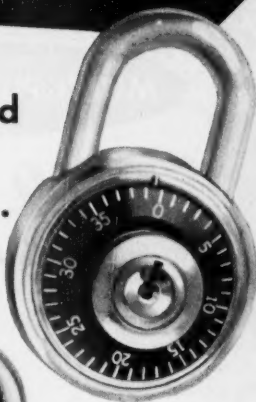
The NATION'S SCHOOLS



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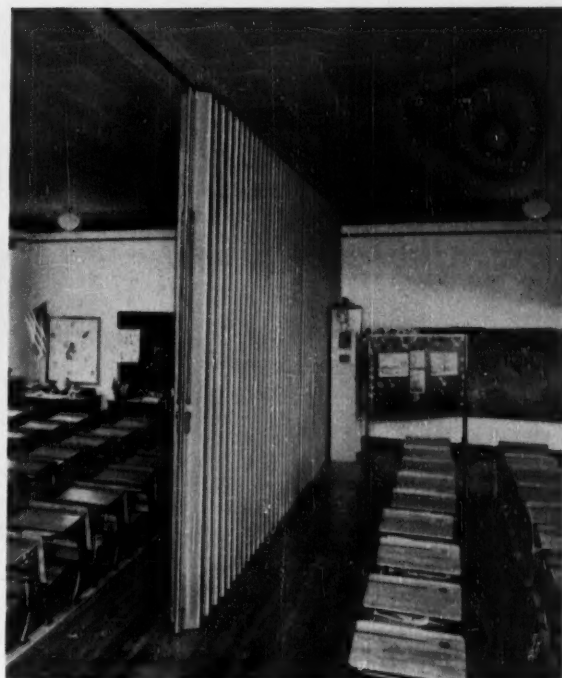
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**NATIONAL LOCK**  
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**SHACKLE LOCKS**

In addition to rugged dependability and complete locker security, National Lock shackle locks offer a new ease of locker administration. Each lock is double tagged, with space for name and locker number. A master chart is included with each order. With orders of 100 or more locks, an attractive leatherette binder is provided. Write us today on your school letterhead. Ask for a free sample shackle lock.



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**fit classrooms to class needs**  
**with "MODERNFOLD" movable walls**

Teaching plans needn't be limited by inconvenient classroom structure—not when you can call on the flexibility of "Modernfold" doors. By making use of the large "Modernfold" movable wall, as shown above, classes can be held together, or separately, according to the demands of the curriculum at the moment.

"Modernfold" doors can be installed quickly, easily, and without costly remodeling, in almost any structure. Maintenance is simple. "Modernfold's" sturdy, rust-resistant steel frame is built to withstand hard knocks. Its tough vinyl covering cleans easily with plain soap and water—doesn't fade, crack or peel. . . .

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the doors that fold  
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Please send full details on "Modernfold" doors

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*Don't be tied to the wall!*

FOLDING TABLE SETS

MULTI-PURPOSE ROOMS



*Rot-Fol* \*

One of nine schools in Bellflower, California, equipped with ROL-FOL. Kistner, Wright & Wright, Architects and Engineers, Los Angeles.

**INSTANTLY DETACHED:**

Tables and/or benches are instantly and individually unlocked from the cabinet and rolled about for various groupings and multi uses. The same key that unlocks the table and benches from the cabinet to roll out and unfold, also unlocks the extended table and benches to detach from the wall.

**INTERCHANGEABLE:**

Any height table or bench will operate together in any cabinet, instantly interchanged without tools.

**MULTI USES:**

In a matter of minutes the room can be set up for cafeteria, or rearranged for classes, assemblies, P. T. A. meetings, social functions, etc. This exclusive unlocking feature creates the multi-purpose room.

**8 GRADED HEIGHTS:**

Available in 8 graded sizes for all age groups. Standard table heights are 23" to 30", and benches 13" to 20", in increments of 1 inch.

**NO STORAGE PROBLEM:**

When it's "clear the decks", ROL-FOL is simply and easily rolled and folded into the steel cabinet, leaving the floor area 100% clear for other activities. Cabinet will fit in a 2 x 6 stud wall. Mounted on the wall, cabinet "sticks out" only 6".

**EASILY INSTALLED:**

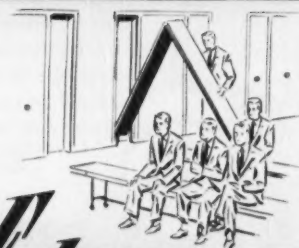
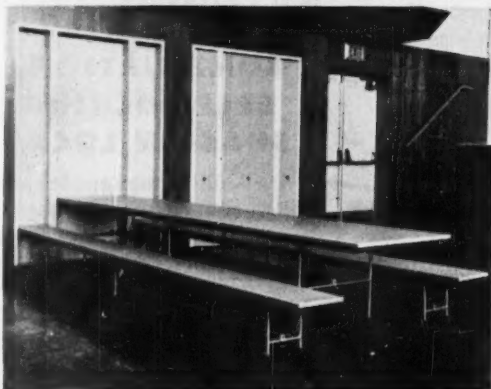
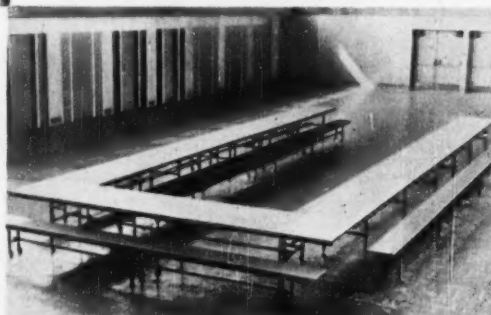
ROL-FOL is simple in design and operation. No trained mechanic needed. Requires approximately 1 man hour to install either "in-the-wall" or "on-the-wall" model.

**QUALITY:**

Made of the finest materials selected to fulfill each exacting requirement. NEW... EXCLUSIVE... CLEAN-LINED STYLING PLUS 100% FUNCTIONAL FLEXIBILITY. ROL-FOL adds to your school a fine piece of furniture.

**COMFORTABLY SEATS 20 CHILDREN:**

Table and benches are 13'-11 $\frac{3}{4}$ " long. Benches are 11 $\frac{3}{4}$ " wide; the table is 30" wide. These extra widths were designed to accommodate both children and adults.



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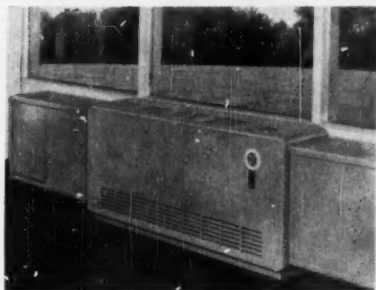
# What's New FOR SCHOOLS

NOVEMBER 1953

Edited by BESSIE COVERT

TO HELP YOU get more information quickly on the new products described in this section, we have provided the postage paid card opposite page 168. Just circle the key numbers on the card which correspond with the numbers at the close of each descriptive item in which you are interested. The NATION'S SCHOOLS will send your requests to the manufacturers. If you wish other product information, just write us and we shall make every effort to supply it.

## Heating-Cooling Unit



The new Herman Nelson Amervent combines cooling, heating and ventilation in one unit for the school classroom. A self-contained electronic temperature control with room thermostat is incorporated into the unit. With this highly responsive control installed and adjusted at the factory, only steam or hot water piping, plus an electrical connection, is necessary on the job, thus simplifying installation.

The Amervent is designed specifically for temperatures of plus ten and above. It is equipped with a super-cooling speed which supplies a high percentage of air to the classroom for comfort cooling in mild weather. The unit is available in three models, with the "CC" model a combination hot water and chilled water unit. Other models operate on steam or hot water and provide ventilation as well as heating. The unit has a low noise level. American Air Filter Co., Inc., Dept. NS, 215 Central Ave., Louisville 8, Ky. (Key No. 764)

## Precision Microscope

The Testa Microscope is a precision instrument at a reasonable price with four powers of magnification. It has a foolproof safety stop to prevent damage to slide and lens and has been designed for use in elementary and high schools. It is well built of quality materials and designed for service in schools.

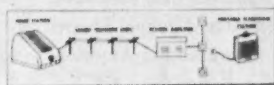
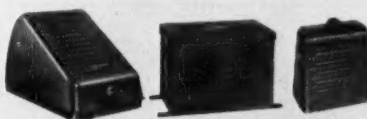
All lenses in the new Testa Microscope are precision ground. The knob controlled rack and pinion raises or lowers microscope tube for sharp focus. Additional ranges of magnification are permitted by the telescopic draw tube. "Science Kit," Dept. NS, Tonawanda, N.Y. (Key No. 765)

## Versarite Chalkboard

A new green plastic chalkboard material has been introduced under the name Versarite. It is exceptionally lightweight and strong with a smooth slate-green surface. It is easily cleaned and, if necessary, may be refinished with steel wool. Versarite is made of tough fiber glass that does not crack, splinter or become mottled. It lends itself well to wall-chalkboard combinations for classrooms since it can double as a wall material. Wright Mfg. Co., Dept. NS, P. O. Box 6567, Houston, Tex. (Key No. 766)

## Telephone Teaching Equipment

Portability and improved reception and appearance are some of the recent developments incorporated into the equipment used for the teaching by telephone of



homebound or hospitalized handicapped children. These improvements are effected by new housings and circuits which increase the usefulness and flexibility of the units. Three units are used in conjunction with standard telephone lines to provide two-way conversation between the classroom and the handicapped child.

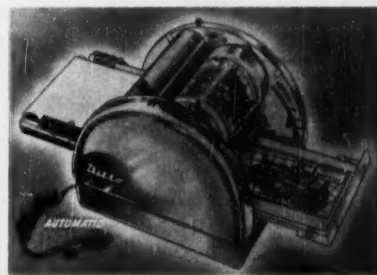
The Student's Station, placed at the child's bedside, is a compact, attractive combination amplifier and microphone-speaker. It permits the child to hear the classroom discussion and to reply when called upon. It has adjustable volume, on-off and control switches. The School Amplifier is usually located in the school office. It is filtered to match electrical characteristics of the telephone line providing transmission without interference with the regular telephone circuits. The Portable Classroom Station contains a combination speaker and non-directional microphone. Classroom discussions are carried by it to the child and his replies

are heard throughout the classroom. The unit is portable and can be carried from classroom to classroom as required. The system has Underwriters Laboratories approval, according to the manufacturer, and is provided on a rental basis by telephone companies, or may be purchased from the manufacturer. Special Education Div., Executone, Inc., Dept. NS, 415 Lexington Ave., New York 17. (Key No. 767)

## Ditto D-11 Duplicator

The new Ditto D-11 is an automatic electric direct process duplicator at a popular price. It is ruggedly constructed and incorporates many features found in the higher priced Ditto machines. The high quality power drive and power clutch ensure quality performance. The machine can be used for hand feed, if desired, through the use of a simple tripping operating handle.

The Ditto Direct Process Duplicating principle is used in the D-11, eliminating the need for stencils, type or mats. It is designed to reproduce two copies per second of anything typed, written, drawn or printed through duplicating carbon, in as many as five colors in one operation. Copies can be made on any weight paper from 16 pound to heavy card stock, and in any size up to 8½ by 14 inches. Features of the new model include a disappearing receiving tray, reversible feed tray facilitating handling of long and short sheets, quick shift paper guide for instant adjustments for various sized forms, swinging feed rollers and stainless steel parts to prevent corrosion. The D-11 has gun metal gray finish



which is stain resistant and easy to keep clean. Ditto, Incorporated, Dept. NS, 2257 W. Harrison St., Chicago 12. (Key No. 768)

(Continued on page 146)



## What's New...

### Midget Curtain Operator

Designed expressly for use with the Vallen Roll-O-Long curtain track, the new Midget Curtain Operator is a general purpose unit for all darkening problems. It is especially effective for use in darkening rooms for visual education. The Midget Operator stops in any direction and can be reversed at any point of travel. The full-floating principle of design ensures tautness of the cable at all times. The new device is 10 inches high, 6 inches wide and 5 inch deep. Vallen, Inc., Dept. NS, 225 Bluff St., Akron 4, Ohio. (Key No. 769)

### Garbage Disposal Unit

A new heavy duty Garbage Disposal Unit for institutions serving up to several thousand meals a day is now available. Powered by a standard 3 h.p. motor, the unit has cutting and shredding sections of finest controlled quality steel. It is designed to handle all types of table and kitchen refuse except metallic and similar objects. Milk cartons, grapefruit shells, hulls, husks, bones and paper go through without difficulty.

The unit is easily installed, is self-cleaning, and maintenance and service are at a minimum. It is operated by simply turning on the water, pushing

the starter button and then feeding in the garbage. The new unit is ruggedly constructed for heavy duty service in institutions. Enterprise Engine & Machinery Co., Process Div., Dept. NS, G23, 18th & Florida Sts., San Francisco 10, Calif. (Key No. 770)

### Heat Absorbing Glass

Coolite, Heat Absorbing Glass, is now available in the new Luxlite pattern. The new glass is of a cool blue color with



a slightly greenish cast. It diffuses light evenly, absorbs solar heat rays and helps keep the interior of the classroom or

office cool and cheerful. Glare is reduced by a special process of manufacture. Coolite is designed to provide natural daylighting with improved pupil comfort and attentiveness. Mississippi Glass Company, Dept. NS, 88 Angelica St., St. Louis 7, Mo. (Key No. 771)

### Nucite Glass Chalkboard

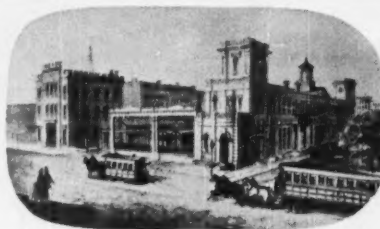
The problem of breakage is said to have been eliminated in the improved Nucite glass chalkboard recently introduced. Another feature of the new board is the ease with which it can be erased. The new board is made by fusing a colored vitreous material to the face of plate glass. A special glass tempering process gives the glass greater ability to withstand shock and injury and eliminates the possibility of shattering. A coating of mastic, applied to the back of the board, provides an added factor of safety.

The improved vitreous enamel surface of Nucite boards is smoother and the finish is more durable. The new surface takes a clean, legible chalkmark and is easy to keep clean. Light-reflection and glare factors are held to a minimum. The new board is available in green and black. New York Silicate Book Slate Co., Inc., Dept. NS, 541 Lexington Ave., New York 22. (Key No. 772)

(Continued on page 148)

### in 1853

When 1 Park Avenue was just a country site near New York's railroad depot, the first bentwood chair invented by Michael Thonet was introduced in America.



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### in 1953

Our modern showrooms at 1 Park Avenue attract the buyers and architects from everywhere who have selected millions of sturdy Thonet chairs.

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## Poor classroom lighting puts a blindfold on his chance to learn

None of the senses is as important to learning as sight. More than 80% of the things we learn come to us through our eyes.

A glare-ridden, badly lighted classroom robs students of full use of their most precious means of education. It makes teaching a discouraging, difficult job.

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## What's New ...

### Contact Bond Cement

An effective and satisfactory adhesive for on-the-job installation of Formica has been developed by The Formica Company. Known as Contact Bond Cement, it ensures a good bond between the Formica sheet and the surface being covered. With the new cement, Formica can be applied to the existing top of a desk, table or other object to be covered, as long as all cracks are filled, the old finish sanded off and rough spots smoothed out. The Formica Company, Dept. NS, 4614 Spring Grove Ave., Cincinnati 32, Ohio. (Key No. 773)

### Teacher's Desk

A large working area with minimum weight is provided in the new Brunswick Teacher's Desk. The desk utilizes the unified design principle to harmonize with other items in the new Brunswick school furniture line. The cellular core top has a beveled edge and is faced with northern maple veneer. It is also available with a durable plastic facing as an optional feature. Two drawers four inches deep that can be locked can be obtained on the desk.

File cabinets level with the desk top and designed in harmony with the desk can be added on either side. They can

be moved about as required. The desk provides ample leg room for comfort and easy floor cleaning. An optional knee panel in red or gray is available and is set in to allow conference activity. The overall height of the desk is 29 inches and the large working surface measures 48 by 30 inches. Also available to complete the unit is a teacher's



chair in matching color, design and material. The Brunswick-Balke-Coller Co., Dept. NS, 632 S. Wabash Ave., Chicago 5. (Key No. 774)

### Thomas Tandem Collator

The new Thomas Tandem Collator operates on a unique tandem principle which permits collating of 32 pages in two groups of 16 pages, four groups of eight pages, etc. It is divided into two sections of 16 bins each and the use of

adjustable trays allows page sizes to vary from 3 by 8½ to 14 by 17 inches. The 32-page collator collates, assembles or gathers reproduced lists, bulletins, directives and other material at speeds as high as 12,000 sheets per hour. It measures 46 inches across and is 22 inches deep, of all-steel construction, finished in soft gray. Thomas Collators, Inc., Dept. NS, 30 Church St., New York 7. (Key No. 775)

### Conductance Tube Tester

Fast testing with convenient ohms readings for leakage and shorts is a feature of the new Simpson Model 1000 Plate Conductance Tube Tester. It will test any receiving tube, including 9 pin miniatures and subminiatures with base arrangements in line or circle. Testing tubes is simple, positive and accurate with the new instrument which has handy multi-position toggle switches for quick adjustments to proper voltages for bias, screen and plate supply. Each tube element is individually connected to the proper potential to ensure against tube damage during testing. Simpson Snap-Out-Snap-In transparent plastic windows are provided over the fast-action roll chart. Simpson Electric Co., Dept. NS, 5200 W. Kinzie St., Chicago 44. (Key No. 776)

(Continued on page 150)

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| • Stools    | • Storage Cabinets | • Tool Boxes  | • Toolroom Equipment   | • Revolving Bins    | • Work Benches    | • Drawer Units  | • Tool Trays  |
| • Bin Units | • Drawing Tables   | • Parts Cases | • Wood Working Benches | • Hanging Cabinets  | • Bench Drawers   | • Hopper Bins   | • Shop Desks  |

## What's New ...

### Low-Cost Projection Screen

A new table and wall model projection screen has been developed which is moderate in price. Known as the "Thrifty," the new screen can be set up in seconds as the projection surface needs only to be unrolled and supported by a single stretcher bar which keeps the "Perma-White" processed fabric completely taut for good projection results. The screen base is designed to rest securely on a desk or table, or the screen may be hung on a wall. The "Thrifty" is simple to operate, compact and light in weight. Radiant Mfg. Corp., Dept. NS, 2627 W. Roosevelt Rd., Chicago 8. (Key No. 777)

### Dust Pickup Unit

A dust pickup vacuum cleaning attachment for use in light sanding or finish sanding operations has been developed for use on Multi-Clean floor machines. Consisting of a detachable vacuum power unit with 1 h.p. motor that mounts on the floor machine handle, the unit can be put on or taken off any Multi-Clean heavy duty floor machine in approximately ten minutes. A suction ring assembly clamps to the base of the machine without drilling. Both the vacuum and the machine operate together

from the switch lever under the floor machine handle bar.

The vacuum has a strong water lift, providing ample power to pick up all sanding dust. The dust bag is easily emptied and the dust hoses are flexible, permitting the machine handle to remain



completely adjustable to comfortable operating position. Multi-Clean Products, Inc., Dept. NS, 2277 Ford Pkwy., St. Paul 1, Minn. (Key No. 778)

### Koroseal Standard

A tough, vinyl, nonporous wearing surface is provided in Sloane Koroseal Standard for counter tops and floor

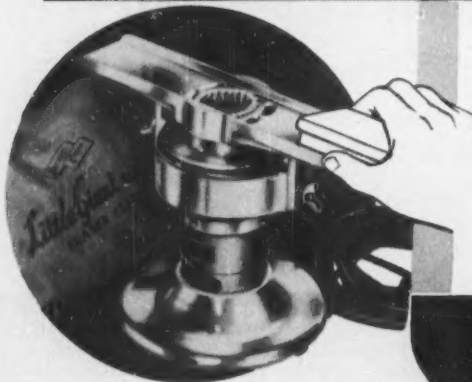
covering. It can be cleaned easily with a damp cloth and does not require scrubbing.

Koroseal Standard Floor Covering is designed for floors where beauty and ease of cleaning are considerations. It is available in 2 and 3 yard widths, in seven overall and four pattern crystalline colorings. Koroseal Counter Top is designed for use on table and counter tops, storage shelves and other work surfaces. It is available in 27, 36 and 45 inch widths in four crystalline and one corktone effect. Sloane-Delaware Floor Products, Dept. NS, Trenton, N.J. (Key No. 779)

### VU Meter for Recording

Easy visual recording control of any recorder is possible with the new Tape-Master VU Meter. It is specifically designed for easier monitoring. The operator can visually determine the correct recording level and can emphasize any particular passage or put an individual interpretation into any recording. The new unit has standard VU scale and sensitivity and is ruggedly built. It comes in black bakelite base ready to connect and is supplied with instructions and calibration data for use with all makes and models of recorders. TapeMaster, Inc., Dept. NS, 13 W. Hubbard St., Chicago 10. (Key No. 780)

(Continued on page 152)



## HERE'S THE PROVEN WAY TO CLEANER CHALKBOARDS

Try this favorite combination in your school. See how Neverip erasers, vacuum cleaned regularly with a Little Giant eraser cleaner, keep chalkboards cleaner. Writing shows up clearer; the whole room is brighter, more attractive. A test will convince you.

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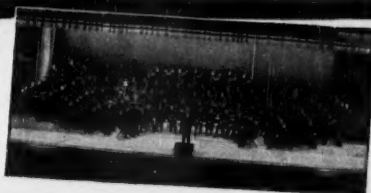
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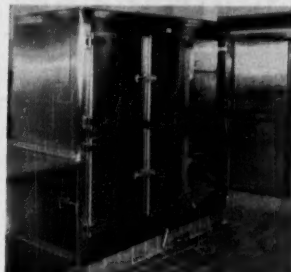
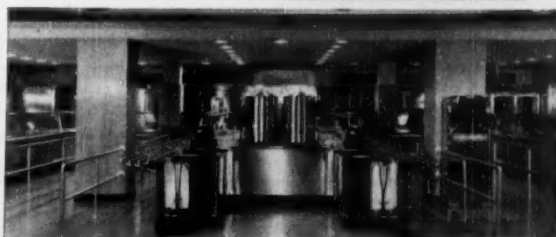
**HERRICK**

**STAINLESS STEEL REFRIGERATORS**

At right is an exterior view of the Memorial Union Building at the University of Oklahoma in Norman. Architects were Sorey, Hill and Sorey of Oklahoma City.



Directly below is the entrance to the Will Rogers Cafeteria in the new building.



At left is a close-up of one of seven HERRICK Stainless Steel Refrigerators serving the Memorial Union's ultra-modern kitchen. Pictured is a HERRICK Model RSS66 Double-Front Pass Through. HERRICK units were supplied by Goodner Van Engineering Company of Tulsa, Oklahoma.

One of the country's finest Memorial Union Buildings is at the University of Oklahoma in Norman. Exceptional dining facilities are offered, including the Will Rogers Cafeteria, Fountain Room, Ming Room and Grand Ball Room. Combined seating capacity is approximately 2,400 people. • All food is prepared in one central kitchen, with the aid of seven HERRICK Stainless Steel Refrigerators. Assuring peak freshness and flavor are three Storage Reach-Ins, a Cook's Reach-In, a Salad Reach-In, a special Milk Refrigerator and a Double-Front Pass Through. For trouble-free, low-cost-per-year service, HERRICK is tops. Quality makes the difference. Write today for name of your nearest HERRICK supplier.

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## What's New ...

### Ford Safety Chassis

The new Ford School Bus Chassis are designed and built to exceed the standard set by the National Education Association for school bus safety. Every important part of the new chassis is constructed to set high standards of safety and performance. Some of the new features include newly designed deep-channel frame, longer springs and new hydraulic brakes.

New Ford chassis are available in a choice of three wheelbases on four chassis, to meet every load requirement, from 36 to 60 passenger capacity. There is also a choice of four engines, V-8 or six, to match power to load requirements for fine performance and economy. Ford Division of Ford Motor Co., Dept. NS, P. O. Box 658, Dearborn, Mich. (Key No. 781)

### Square Folding Tables

New Square Banquet Tables, which can be used in the cafeteria, teachers' rest rooms, homemaking classroom and other areas in the school, and folded for storage when not in use, are now available. The new tables have the rigidity of standard square tables with the advantage of folding. They are constructed with the quality workmanship of all

Midwest tables and are available in three sizes—30, 33 and 36 inches square, all 29½ inches high. They are available with fir top or G.E. Textolite plastic for long wear and easy cleaning. The ex-



truded plastic "T" molding is designed to prevent collection of dirt or food particles and for easy cleaning. All legs are fitted with chromium marproof glides. Midwest Folding Products, Dept. NS, Roselle, Ill. (Key No. 782)

### Dixie Milk Service

The new Dixie Nylon Holder with Dixie Cone Cups and Dispensers, used in conjunction with bulk milk dispensers, offers a practical, low-cost milk service for school cafeterias and milk bars. Designed especially for school feeding programs where durability and economy are of prime importance, the new milk serv-

ice eliminates the need for individual milk containers. Thorough testing has shown the new Dixie Nylon Holder to be practically unbreakable, color fast and durable. It is light in weight, has a wide base to keep it from being easily tipped over, and is easy to hold. Dixie Cup Co., Dept. NS, Easton, Pa. (Key No. 783)

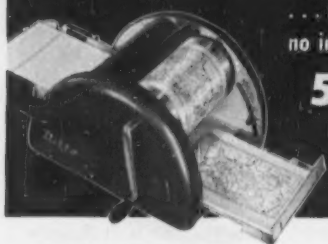
### Electronic Organ

A completely portable versatile instrument for schools and other institutions is offered in the new Model 40 Organ-Scenic. It is a mahogany-finished spinet-type electronic organ unit which requires less space than a spinet piano, yet combines traditional organ tone quality with theater-type tone colors. The light weight unit is designed for use where a broad variety of music programs is offered.

The construction and arrangement were developed to facilitate effortless playing by either the novice or the experienced organist. The instrument incorporates electronic principles used on the larger models. There are no moving elements in tone generation or amplification, thus the instrument requires a minimum of maintenance. It is equipped with a self-contained, 20-watt amplification system. The Baldwin Piano Co., Dept. NS, Gilbert Ave., Cincinnati 2 Ohio. (Key No. 784)

(Continued on page 156)

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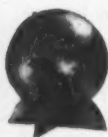


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The NATION'S SCHOOLS, published monthly at Chicago, Illinois, for October 1, 1953:

1. The names and addresses of the publisher, editor, managing editor, and business managers are:

Publisher: The Nation's Schools Division, The Modern Hospital Publishing Co., Inc., Chicago, Ill.

Editorial Director: Robert M. Cunningham Jr., Chicago, Illinois.

Managing Editor: Arthur H. Rice, Chicago, Illinois.

Business Manager: Stanley R. Clague, Chicago, Illinois.

2. The owner is: (If owned by a corporation, its name and address must be stated and also immediately thereunder the names and addresses of stockholders owning or holding 1 percent or more of total amount of stock. If not owned by a corporation, the names and addresses of the individual owners must be given. If owned by a partnership or other unincorporated firm, its name and address, as well as that of each individual member, must be given.)

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5. The average number of copies of each issue of this publication sold or distributed, through the mails or otherwise, to paid subscribers during the twelve months preceding the date shown above was: (This information is required from daily, weekly, semiweekly, and triweekly newspapers only.)

STANLEY R. CLAGUE, Business Manager.

Sworn to and subscribed before me this 23rd day of September, 1953.

[SEAL]

J. P. McDERMOTT, Business Manager.  
(My commission expires Sept. 29, 1953.)



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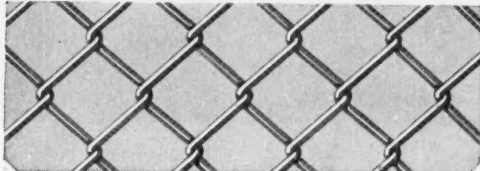
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weighs just 27 pounds

2 full hours of true-to-life recording or playback...voice, music, radio programs, school activities, anything.



ONLY  
\$189.50

### PENTRON ACCESSORIES

Foot Control—starts and stops recorder. Leaves hand free for teaching.

AM Radio Tuner—for playing or recording radio programs.



Write for FREE BOOKLET and DEMONSTRATION!

**THE PENTRON CORP.**

664-Nr North Michigan Ave., Chicago 11, Illinois

Name \_\_\_\_\_ School \_\_\_\_\_  
Address \_\_\_\_\_  
City \_\_\_\_\_ Zone \_\_\_\_\_ State \_\_\_\_\_

# What's New ...

## Automatic Slide Projectors

The new line of La Belle Slide Projectors is fully automatic in operation. Slides are changed instantly and automatically, making possible a full hour of showing without handling the slides. Merely a flick of the finger brings on the next slide, and the automatic action re-stacks the slides in their original sequence, replacing them in another magazine. Turbine cooling starts immediately the projector is turned on by the master safety switch, keeping bulb at correct temperature for longer life. Remote Control Push-Button Slide Changer works anywhere in the room. Other features in the line of La Belle Projectors include single "micro-focus" knob, turbine high-efficiency cooling, pre-warming chamber for slides, precision optical system, "free-flow" selector head and finger-tip tilt controls. **LaBells Industries, Inc., Dept. NS, Oconomowoc, Wis. (Key No. 785)**

with modern appearance in this compact, lightweight unit. Input and output jacks and all controls are grouped at the back of the top panel for easy accessibility. The unit is easy to service, with a minimum number of moving parts, yet pro-



vides a range of combinations enabling the listener to set the tone precisely to his taste.

The new model provides either manual or foot control for instantaneous starting and stopping during recording and playback. A convenient pocket in the cover of the case furnishes storage for microphone and cord and reels of tape. The case is finished in plastic in hunter green and silver gray. **Webster Electric Co., Dept. NS, 1900 Clark St., Racine, Wis. (Key No. 786)**

(Continued on page 158)

## Ekotape Recorder

The "Golden Tone" Ekotape is a new model tape recorder designed to play at either  $7\frac{1}{2}$  or  $3\frac{3}{4}$  inches per second. A single switch selects the speed desired and provides the necessary compensation within the amplifier for the change in speed. Functional styling is combined

## Reach-In Refrigerators

Several new developments have been announced in reach-in refrigerators by Koch Refrigerators. A sliding glass door refrigerator in 45 and 70 cubic foot size has doors framed in polished aluminum and plastic. They are top suspended, easy-rolling and tight-sealing. The glass is double Thermopane, set in rubber. The sliding doors allow for maximum use of floor space. A similar 25 cubic foot refrigerator is also available.

Standard remote and self-contained models Series 3800 and Series 2800 are now available as pass-through cabinets, with doors front and back. They are designed for use where it is advantageous to load the cabinet from both sides, or to load from one side and withdraw from the other. They are especially helpful in the middle of the workroom or kitchen, or in the wall between preparation and service areas.

Designed for use in institutions and other medium-sized food service establishments is the new Koch Series 6800. These hinged-door cabinets are designed to provide capacity, quality and economy for smaller commercial refrigerator applications. Model 6825 has forced convection system. Model 6821 has an ice-maker unit. **Koch Refrigerators, Inc., Dept. NS, North Kansas City, Mo. (Key No. 787)**



## TABLE AND BENCHES FOLD AUTOMATICALLY

Just press foot on lock, lean forward, bring hands together and your weight folds table. Then fold benches. Entire operation of table and benches is done from one end.



## ROOMY

Benches allow for greater seating capacity. Lots of elbow room.



## BENCH WITH BACK REST

When table is folded and one bench open, it can be placed against the wall for seating. Comfortable, slanting back rest.

# HOWE does it again!



## HOWE'S New Walk-A-Way Bench and Table Unit

This flexible and multipurpose bench and table combination is wonderful for classroom, cafeteria, gym and many other uses.

## RUGGED BATTLESHIP CONSTRUCTION

- Top is  $\frac{7}{8}$ " thick with fir plywood core and  $\frac{1}{16}$ " tan linen plastic on top and bottom. "T" aluminum molding edge around top.
- Benches are 1" thick, hard wood. Taupe finish.
- Legs are 1" heavy gauge steel zinc plated. Metal slides on bench legs. Table legs have 3" double ball bearing rubber casters.

Dimensions: Table—30" x 72" x 27" high. Benches—9 $\frac{1}{2}$ " x 72" x 16" high. Folded position—17 $\frac{1}{2}$ " x 72" x 38 $\frac{1}{2}$ " high.

If it folds — ask HOWE



## TWO TIER BLEACHER

With table and one bench open it can be placed against the wall and be used as a two tier "bleacher."



## NO LIFTING OR LUGGING

Folds compactly and can be moved from place to place with ease. One person can walk away with two units.

## MANUFACTURERS OF ALL KINDS OF FOLDING TABLES FOR SCHOOLS

**HOWE FOLDING FURNITURE, INC.**

**One Park Avenue, New York 16, N. Y.**

# CRANE FIXTURES\_

## part of sound school planning



Crane Coolbrook drinking fountains are typical of the practical modern design that distinguishes all Crane fixtures. Now available with recessed Wal-Pak cooling unit that supplies mechanically chilled water to one or more fountains at low cost.

A million more children will be reaching school age every year for the next twenty years. That means school authorities are planning new construction from a long-range point of view.

Crane plumbing fits right in with this kind of planning.

The Crane specialized school fixtures you install today can be counted on to serve future generations of students . . . and to continue to operate and look like

new for years to come. They are as durable and advanced as today's new school buildings themselves . . . conforming to modern architectural planning . . . helping solve problems of space, maintenance and cost.

When planning new school construction or new facilities in present buildings, let your Architect and Plumbing Contractor know your preference for Crane. Insistence on Crane is a part of sound school planning.

# CRANE CO.

GENERAL OFFICES: 836 SOUTH MICHIGAN AVE., CHICAGO 5  
VALVES • FITTINGS • PIPE  
PLUMBING AND HEATING



## What's New ...

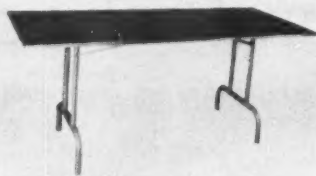
### Perforated Acoustical Material

A new perforation design is offered in Armstrong Full Random Cushion-tone acoustical material. The new design has non-directional perforations, spaced at random over the face of the tile. It provides a change from the straight-line perforation design and offers greater freedom in creating interiors with a low-cost acoustical treatment. The new Full Random Cushion-tone has narrow bevels with minimum border between the perforations and bevel. It has high light reflection and the factory painted surface is washable. It may be repainted with an oil base paint if desired. Armstrong Cork Co., Dept. NS, Lancaster, Pa. (Key No. 788)

### Howe Banquet Table

A new pedestal-leg type folding banquet table has been added to the line of Howe Folding Furniture. The new table features all steel chassis, strong, foolproof lock with self-tightening principle, two separate braces for each pair of legs, and legs of 1 1/4 inch tubing with brazed joints. The retracting leg action is designed to allow maximum seating at both sides and ends of the table. When folded, the table occupies only 1 1/2 inches in width. Masonite, Formica or lino-

leum tops on plywood are available on the tables which come in 30 by 48, 30 by 72, 36 by 72, 30 by 96 and 36 by 96 inch sizes, 29 inches high. Howe Fold-



ing Furniture, Inc., Dept. NS, 1 Park Ave., New York 16. (Key No. 789)

### Opaque Projector

The Taylor Model TS-3 direct-image Spotlight Opaque Projector is an improved unit for projecting teaching or lecture material. It has a plate glass sheet which can be used on the sliding copy tray to press copy down flat. Even open books can be inserted and pressed flat by the plate glass sheet, to be projected without distortion. The copy cabinet is pressurized with a large volume of equally distributed air to hold copy down while cooling the projector.

A feature of the Model TS-3 is the newly designed "light beam" pointer which can be removed if desired for facil-

(Continued on page 160)

ity in pointing to any desired section of the projected image. It has fingertip control and can be used on the machine or away from it. The Model TS-3 projector is light in weight, cool in operation, handles page size up to 11 by 11 inches, including glossy prints, and has all of the advantages of earlier models. Squibb Taylor, Inc., Dept. NS, 1213 S. Akard St., Dallas 1, Tex. (Key No. 790)

### Wal-Pak Water Cooler

Built to operate efficiently within a louvered wall aperture the new Wal-Pak water cooler is designed to supply uniformly cool water to a wall fountain of any style selected to harmonize with an interior. The louvered panel is flush-mounted with the wall and toned to match, leaving an unbroken wall surface and preventing collection of corridor dirt. The cooling unit is completely concealed, silent and safe-guarded against abuse. Wal-Pak is suitable for new construction or modernization and can be installed in the wall, under floor or counter to supply chilled water to any new or existing outlets. It is available in two sizes, to supply 50 degree water for 50 to 100 persons per hour at one or two fountains. Filtrine Manufacturing Co., Dept. NS, 53 Lexington Ave., Brooklyn 38, N.Y. (Key No. 791)

**Heyer**  
**has IT!**  
only \$185 complete!

**New!**  
**CONQUEROR**  
**SPIRIT**  
**DUPLICATOR**  
with ALL the features:

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PRICED FAR LOWER THAN ANY COMPARABLE MACHINE...  
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**200**  
**CHILDREN**  
**SAFELY ESCAPED**  
**RAGING FIRE**

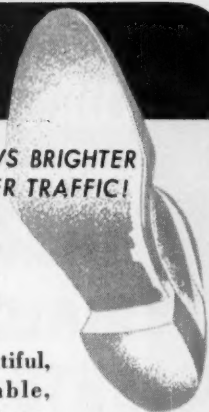
**POTTER SLIDE**  
**TYPE FIRE ESCAPE**  
*in seconds instead*  
*of minutes*  
**MADE RESCUE POSSIBLE**

Mothers, Fathers, Teachers and Principals realized that a precaution taken only six years before insured the irreplaceable lives of their dearest possessions. SAFEGUARDING occupants of SCHOOLS, HOSPITALS and ALL PUBLIC INSTITUTIONS is assurance of family comfort and happiness when protected by POTTER SLIDE TYPE FIRE ESCAPES. Over 9,000 in service on two to 34 story buildings, saving 44 sq. ft. of usable floor space on each floor instead of stair wells.

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For QUICK DETAILS, PHONE COLLECT (ROgers Park 4-0098)

## DOLCOWAX for BEAUTIFUL FLOORS

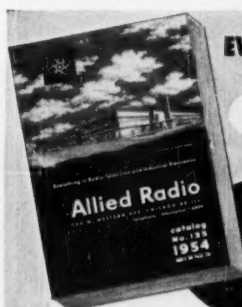
DOLCOWAX is a premium-quality floor wax for general use, sold with the guarantee that, regardless of price, *no competing floor emulsion wax will outwear it!* Easily applied, DOLCOWAX leaves a beautiful, lustrous film, hard and durable, which actually *improves* in lustre under foot traffic.



For **FREE**  
**SANITARY SURVEY**  
of Your Premises  
consult your  
**DOLGE SERVICE MAN**

DOLGE has a floor finish for every specific purpose. If you have a special floor maintenance problem, your Dolge Service Man will gladly demonstrate the correct finish. No obligation, of course.

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**DOLGE**  
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FOR THE  
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- Custom TV Chassis
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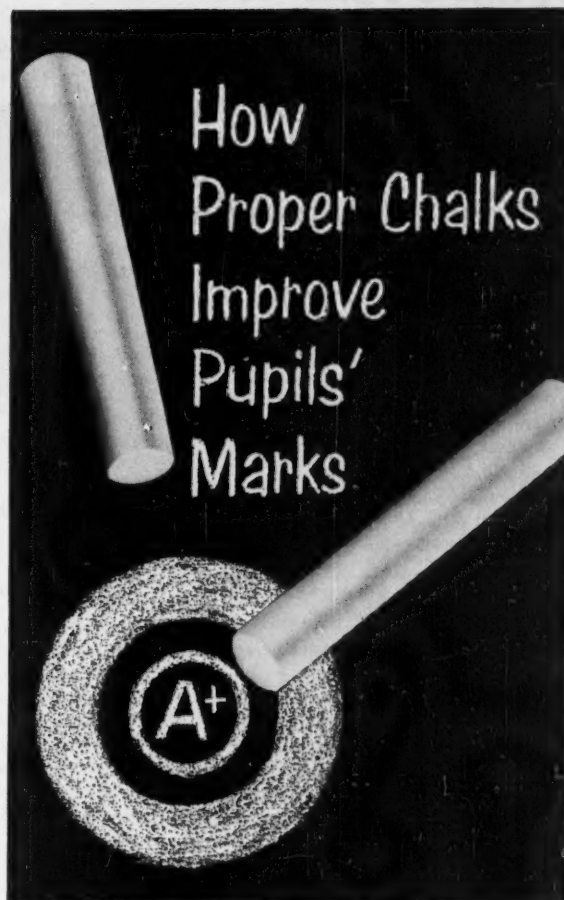
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**SPECIALISTS  
IN ELECTRONIC SUPPLY  
FOR SCHOOLS**

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ALLIED is the one complete, dependable school supply source for all radio and electronic needs. We specialize in equipment for training purposes; our experts invite your inquiries. You'll find our 268-page 1954 Catalog the most complete buying guide to the world's largest selections of TV, Radio and Electronic equipment. Depend on ALLIED for time-saving, money-saving, expert electronic supply service. Write today for our **FREE 1954 Catalog**—your complete guide to everything in Electronic equipment.

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Chicago 80, Illinois



# How Proper Chalks Improve Pupils' Marks

Some chalks fight the students and so retard their progress. They are uneven in quality, harsh and irritating to use, hard on the chalk-board and on the sight.

The GOLD MEDAL Line of School Chalks, all classroom and laboratory-tested, are made of the highest quality materials, free from gritty or greasy substances. They are smooth and inviting to the touch, intensely white or colored, and bear the Certified Products Seal.

The following brands are used by leading public, private and parochial schools all over the country.

- AN-DU-SEPTIC®** White or Colored Dustless Crayon
- AN-DU-SEPTIC® KLEERWAE®** Colored Crayon for Colored Chalkboards
- AN-DU-SEPTIC®** Yellow Dustless Sight-Saver Crayon
- ANTI-DUST®** 95% Pure Chalk White Dustless Crayon
- ATLANTIC®** and **PACIFIC** White, or White with Yellow Enamel Coating, Chalk Crayon
- B&S®** and **UVA®** Colored Chalk Crayon
- UVA®** Lecturers Colored Chalk Crayon
- POS-TER-ART®** Extra Size Colored Chalk Crayon

**BINNEY & SMITH CO.**  
380 Madison Ave., New York 17, N. Y.

**SEND FOR** New Golden Anniversary School Catalog. Contains valuable teaching aids. Address Dept. NS-11.

Celebrating 50 Years of CRAYOLA® Leadership

## What's New ...

### Colored Photocopies

A new process has been announced that will permit the making of photocopies in any color. With the Apeco Systematic Auto-Stat photocopy machine employing the new color process, even an inexperienced operator can produce a minimum of 100 copies per hour in any color. The unit is designed to handle letter and legal size copies as well as larger copies up to 11 inches wide, in any length.

The equipment is simple to operate, and the process is clean. There is no limitation as to type of paper or originals that can be copied, whether printed on one or both sides or on opaque or translucent paper. Copies can be made in any color, no matter what the color of the original. The American Photocopy Equipment Co., Dept. NS, 1920 Peter-son Ave., Chicago 26. (Key No. 792)

tator for dispensing prevents packing of contents. The dispenser is easily loaded through large perforations which elimi-



nate the need for locks or keys, yet protect against pilferage. The DeWitt Company, Dept. NS, 603 Addison St., Chicago 13. (Key No. 793)

### Sound Language Converter

The new DeVry Magnetic Sound Language Converter is designed to re-record foreign languages magnetically onto films that already contain optical tracks in another language. The unit employs four mixing channels and two sound heads to produce professional re-recording that retains the elements heard on the original optical track. In the case

of dialects, a film taken to another part of a country can have the old track quickly erased and replaced by the dialect employed in the area. This permits using the same film repeatedly. The converter is a self-contained, portable unit. DeVry Corporation, Dept. NS, 1111 W. Armitage Ave., Chicago 14. (Key No. 794)

### "Stencil-Writer"

A new model of the Vari-Typer has been developed for the preparation of mimeograph stencils with a variety of print-like faces, in various styles and sizes. Known as the "Stencil-Writer," the machine was designed for the composition of reading matter from changeable type fonts. Yet the selection and use of type is a simple operation.

As many as 15 type fonts, each complete with upper and lower case, symbols and punctuation marks, is contained in the drawer at the base of the machine. A selection of any two type fonts fits into operating position at one time and change from one to the other is accomplished by turning a knob. An electrically controlled impression mechanism gives each character the same uniform impact. The Ralph C. Coxhead Corporation, Dept. NS, 720 Frelinghuysen Ave., Newark 5, N.J. (Key No. 795)

(Continued on page 162)

## Checker

### This Modern Steel Rack



Accommodates 50  
in 5 Feet!

Keep wraps aired and in press—save space... lengths to fit in anywhere. Individual coat rack units for self-service or complete Check-room layouts with the "One Check" numbering system. Six, 12, and 24 place costumers. Combination rack and locker units or complete locker rooms.

Checker equipment is widely used in schools, public buildings and institutions. Standard with leading architects.

Stationary—Portable. Write for Bulletin No. CK25.



VOGEL-PETERSON CO.  
1121 West 37th St. • Chicago 9, Ill.



The illustration, below, shows the Naden "Instant-Vue" Model N-400-IV—the finest football scoreboard made. Other Naden models, in a wide range of types and sizes, are available to meet every scoring need.

SIMPLE  
COMPACT  
ACCURATE  
DEPENDABLE

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No. 22—FOOTBALL  
No. 23—BASKETBALL  
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NADEN AND SONS WEBSTER CITY, IOWA



# New Lower Prices!

## AMERICAN SEATING FOLDING CHAIRS OUTLAST ALL OTHERS!

### UNEQUALED FOR STRENGTH

Engineered like a bridge of triangular-steel tubing! The four reinforcing cross-braces are rugged steel bars, shouldered against the inside of the tube and securely riveted outside.

### UNEQUALED FOR COMFORT

Even portly people relax and say "Ah-h-h!" as they sit back in the extra-wide, extra-deep seats of special body-fitting design, their shoulders welcomed by deep-drawn back panels.

### UNEQUALED FOR SAFETY

There are no snagging, pinching, or soiling hazards, no sliding or binding parts to pinch fingers. 5-ply birch plywood seats are hot-press bonded; edges rounded, won't chip or feather in long use. Chair can't tip forward in use.

### UNEQUALED FOR CONVENIENCE

These chairs fold quickly, quietly, compactly, and are silent in use as well. Long-life tread-rubber shoes won't come off in use, cannot injure finest floors; can't slip, slide or rattle.

### 3 POPULAR SEAT STYLES

**No. 54**—5-ply formed Birch Plywood, hot-press bonded to permanent body-fitting comfort-shape. **No. 53**—Shaped Steel for rugged outdoor or indoor use. **No. 56**—Imitation-leather Upholstered, highest quality material over cotton padding on plywood base.

**ALL METAL PARTS** corrosion-resistant Bonderized, followed by two coats of enamel—one coat dipped to insure internal coverage of tubes, eliminating rust and noise—an effect similar to automobile undercoater.



**LOWEST PER-YEAR COST!  
OVER 10 MILLION IN USE!  
OUTNUMBER ALL OTHERS  
IN SCHOOL USE**

### MAIL COUPON TODAY!

*American Seating Company*

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- ☐ Please send your latest brochure on AMERICAN SEATING FOLDING CHAIRS.  
☐ I am interested in \_\_\_\_\_ (quantity)  
☐ Birch seats. ☐ Steel seats. ☐ Upholstered seats.

Name or School \_\_\_\_\_

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City and Zone \_\_\_\_\_ State \_\_\_\_\_

Individual and title \_\_\_\_\_



### HANDY STORAGE TRUCKS

Four styles, for general or under-stage use. Permit easy, fast, convenient storage. Swivel casters, removable handles, ample capacity.

**Clamps for Sectional Grouping.** Permit fastening chairs in sections of two, three, or four, one inch apart.

**Steel Threshold.** Available to lock chairs into position at ends of rows, 30° back to back, for three or more rows.

## NOW Rauland ALL-FACILITY Central Control Dual-Channel SCHOOL SOUND SYSTEMS

**Unsurpassed Educational Tool:** The RAULAND S220 All-Facility Console gives you modern, smooth administrative control of the entire school plant. Available to serve up to 80 rooms, the system performs every conceivable function: distribution of administrative information, radio broadcasts, recorded music, school entertainment, instruction—plus instant 2-way intercommunication with all classrooms. Available also in S120 Console model, less desk. The last word in School Sound—quality-built to remain modern for years.

### Your Choice of Every Desirable Program Facility

#### Program Panel

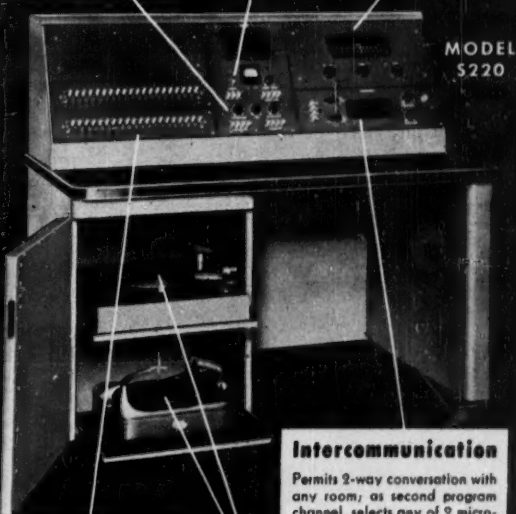
Selects any of 3 microphones or Room Return; mixes with any of 4 programs: Radio, Phono, Recorder or Remote Line. (Second program channel is combined with intercom panel.)

#### One-Operation Emergency, All-Call and Pre-select Switch

#### FM-AM Radio

Selects any radio program on the complete FM band or the entire AM standard broadcast band.

MODEL  
S220



#### Intercommunication

Permits 2-way conversation with any room; as second program channel, selects any of 2 microphones, radio or phonograph.

#### Switch Panel

Selects any or all rooms (available with up to 80 room capacity) for all program distribution functions.

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Choice of Automatic Changer playing all record sizes and speeds, or Transcription Player playing up to 16" records of all speeds.

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Send full details on RAULAND School Sound Systems. We have . . . . classrooms; auditorium seats . . . . .

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City . . . . . Zone . . . . . State . . . . .

## What's New ...

### Vinyl Asbestos Tile

VinylBest is the name of a new vinyl asbestos tile recently added to the Gold Seal line. It is available in seventeen patterns in brilliant colorings in swirl marble. It is designed for installation over on or below-grade concrete floors in contact with the ground, as well as over the usual suspended wood and concrete floors. It makes a sturdy, long-wearing floor for institutional or commercial use.

The new tile has a high resistance to acids, alkalis, cooking grease and vegetable fats. It is manufactured in 9 by 9 inch squares in 13 patterns in the commercial weight and 12 patterns in household weight. Congoleum-Nairn Inc., Dept. NS, 195 Belgrave Drive, Kearny, N. J. (Key No. 796)

### Challenger VisualCast

A new model of the VisualCast for presenting material on a screen for teaching or lecturing is now available. The device permits the instructor or lecturer to face the audience while projecting the material on a screen behind him. The new Challenger Model VisualCast has all glass optics 9 inches in diameter. It projects writing, drawing and transparent pictures on screen or wall, without

darkening the room. It is simple to operate, requiring no special training. The speaker can sketch, draw, diagram, write, erase and re-write on the plastic scroll as he talks. Victorlite Industries, Inc.,



Dept. NS, 4117 W. Jefferson Blvd., Los Angeles 16, Calif. (Key No. 797)

### Spectrograph

Designed to bring precision spectrography within the reach of colleges, hospitals and even high schools, the new 1.5 meter stigmatic grating spectrograph is available in two models. Both are capa-

ble of analyzing a wide range of non-ferrous materials and are suitable for use on the more complex spectra of unalloyed gray irons, plain carbon steels and low-grade ores. Weighing only 150 pounds, the instrument is 12 inches high, 18 inches wide and 60 inches long. The compact size and freedom from moving parts and adjustments were designed to meet the needs of institutions and of inexperienced spectrographers. Bausch & Lomb Optical Co., Dept. NS, 635 St. Paul St., Rochester, N. Y. (Key No. 798)

### Roof Coating

A new silicone content roof coating has been developed and is known as Siliconed Rufferseal. It combines silicones with long fiber asbestos, imported asphalt and non-evaporating waterproofing oils for long durability as a roof coating. It is designed to saturate and preserve roofing felts and to remain elastic and waterproof. It has improved resistance to oxidation caused by sun rays and industrial fumes, and is said to be free from checking, cracking and sagging. Siliconed Rufferseal is easily applied without heating and can be brushed or sprayed on surfaces of any size. The Monroe Company, Inc., Dept. NS, 10703 Quebec Ave., Cleveland 6, Ohio. (Key No. 799)

(Continued on page 164)



## Use Timber for Modern School Design

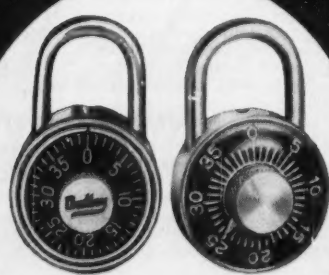
Primary room in Washington Elementary School, Centradio, Washington. Size 32 x 32 ft. Glued laminated timber beams spaced at 10 feet 8 inches support roof structure including monitor which directs light into the interior of the room. Architect: William Arild Johnson, A.I.A., Seattle.

Borrowing from years of happy experience with engineered timber construction of industrial plant buildings, architects by the score are now using glued laminated structural members of Timber Structures, Inc., in designing their schools. Results are the same—time-saving construction, genuine economy, minimum maintenance, effective resistance to destruction by fire, and adaptability for efficient, functional operation.... Outstanding examples of timber school construction are shown in the color booklet, "Modern, Functional Schools". Get your free copy from your nearest Timber Structures office, or write us.

## TIMBER STRUCTURES, INC.

P.O. BOX 3872-N, PORTLAND 8, OREGON

Offices in Ramsey, N. J.; Chicago; Detroit; Kansas City; St. Louis; Minneapolis; Columbus; Omaha; Des Moines; Wichita; Dallas; New Orleans; Birmingham; Memphis; Charlotte; Louisville; West Hartford; Seattle; Spokane; Eugene; Richmond, California; Peterborough, Ontario; New Westminster, British Columbia.



**RD-2      RP-5**

**2**

**DUDLEY LOCKS** with the same purpose

You practically eliminate school locker problems with either of these rugged Dudley combination padlocks backed up with Dudley Master Chart Control. The RD-2, with stainless steel case, has a rotating dial, while the RP-5 has the knob pointer. Locking mechanisms are rust-resistant. Forty

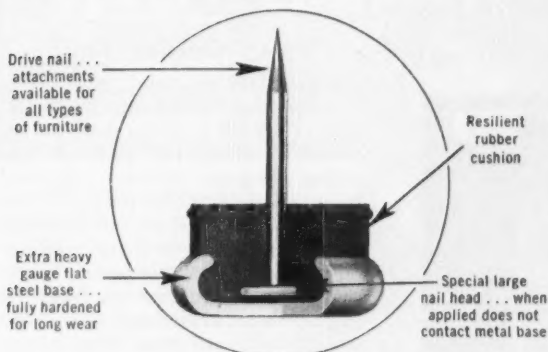
clearly defined numerals make 64,000 possible combinations.

Dudley also offers the P-570 with the exclusive Dudley Master Key, not duplicated by commercial key-making machines. Send for the free illustrated Dudley catalog, and details of the Dudley Self-Financing Plan.

## DUDLEY LOCK Corporation

DEPT. 1110, CRYSTAL LAKE, ILLINOIS

## BASSICK GLIDES for school furniture STOP NOISY SCRAPING OF FLOORS



Chairs, desks—practically any piece of school furniture—can be moved quietly without scuffing or scraping floors on these Bassick Glides. A complete range of sizes and types fit all wood and metal furniture. THE BASSICK COMPANY, Bridgeport 2, Conn. In Canada: Belleville, Ont.



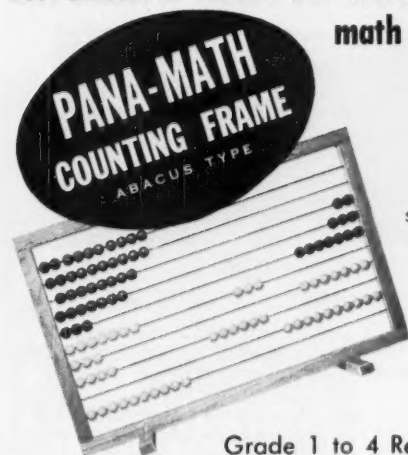
# Bassick

A DIVISION OF



MAKING MORE KINDS OF CASTERS... MAKING CASTERS DO MORE

## For effective visual elementary math teaching



### Grade 1 to 4 Requirement

Pana-math is a versatile classroom counting frame for incidental learning of the important concepts of arithmetic. The ancient abacus is now adapted as a modern teaching aid to visualize numbers, groups and relationships by actual arrangement of beads. Sturdily constructed of 13/16" hardwood the frame has 10 removable push-spring rods each with 10 colorful beads. Your teachers will appreciate Pana-math . . . highly commended by teachers, principals and boards (Pat. Pend. . . Reg. App. for)

- Time Teaching Clocks • Folding Easels • Stoves
- Sinks • Refrigerators • Ironing Boards
- Educational Toys • Jig-saw Puzzles • Peg Boards
- Drawing Boards • Playhouse Screens • Beads

DEPARTMENT NS

**DAINTEE TOYS, INC.**  
230 STEUBEN STREET, BROOKLYN 5, N. Y.

Send for "Manual for Teaching with Counting Frame" by Dr. Irving Allen Dodes.



## VIRCO school furniture

These rugged and handsome desks, tables and chairs help pay for themselves in maintenance savings alone!

"No glare" Vircolite tops\* are impervious to scratches, gouges, stains, cleansing agents . . . require no refinishing.

Frames are of high-strength tubular steel with smooth, chip resistant finish.

\*Also available in solid Eastern Maple.



#464 Two Pupil Table



#460 One Pupil Table



#729 Lift Lid Desk



#100 Classroom Side Chair

Free catalog upon request. Send us your specifications and bid forms!



**MFG. CORPORATION**  
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EASTERN OFFICE: 11 WEST 42ND STREET, NEW YORK 36, NEW YORK



## What's New ...

### Rectifier Kit

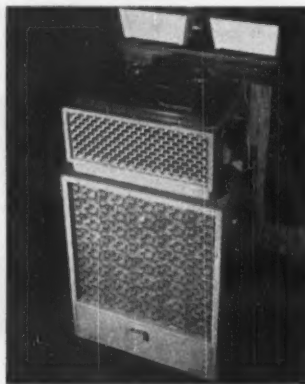
A build-it-yourself rectifier kit has been developed for use in physics and electrical laboratories for experiments, demonstrations and construction. With the new kit the user can assemble his own rectifier of 2 amps to 12 amps at voltages up to 220. The kit contains the major parts of these rectifiers and complete instructions for assembling the desired rectifier. The instructor can make the assembly himself while lecturing to the class, or it can be done by a student. The Electronic Rectifier Company, Dept. NS, Rochester 2, N. Y. (Key No. 800)

### Electronic Tape Recorders

Two new all-electronic, fully automatic high-fidelity music and voice tape recorders have been introduced by Ampro Corporation. Ease of operation of the new models is provided by five functional "piano-key" controls. They are operated electro-magnetically to give instantaneous control silently. High fidelity that retains the quality and depth of the voice or music is incorporated into the new models.

The Celebrity, Model 755, has a tape speed of  $3\frac{1}{2}$  inches per second. The Hi-Fi, Model 756, has a tape speed of

$7\frac{1}{2}$  inches per second, permitting maximum fidelity of the full range of audio reproduction. Both machines have complete electro-magnetic, push-button operation. Solenoids operate all controls, eliminating breakdowns and wear from mechanical linkage and providing fast,



simplified, foolproof recording and playback. Instant starting and stopping of tape movement are ensured and tape breakage and spillage prevented. A matching console speaker cabinet is also available as an accessory to either of the recorder models. The cabinet houses a 12 inch Alnico 6 speaker and is scientifically constructed to provide clear re-

sponse of both low and high frequencies. Ampro Corporation, Dept. NS, 2839 N. Western Ave., Chicago 18. (Key No. 801)

### Light Gauge Steel Panel

A new building panel product has been introduced as the Fenestra Double Hat "D" Panel. It is designed for use in floors, ceilings and roofs to span greater distances between structural beams than the single-hat panel. In some cases the new panel can be manufactured in lengths up to 33 feet, eliminating the use of structural beams. In the construction of ceilings or floors for single-storied schoolrooms the new panels would span across from bearing wall to bearing wall.

Designed in accordance with the specifications of the American Iron and Steel Institute, the new light-gauge steel double hat panels interlock quickly and easily to form subfloor or a combination ceiling and roof. They are spot welded to supporting structural beams or walls. Combining structural characteristics with a finished interior, exterior or both, when assembled, the panels may be electrified as a floor or acoustically treated as walls or ceilings. Detroit Steel Products Co., Dept. NS, 2250 E. Grand Blvd., Detroit 11, Mich. (Key No. 802)

(Continued on page 166)



## 2 SPECIAL TOPS 5 FINISHES



Write for New 1934 Catalog No. 220 showing five Monroe Folding Banquet Tables in full color with tops especially adopted for school cafeterias.

### FORMICA — ORNACEL

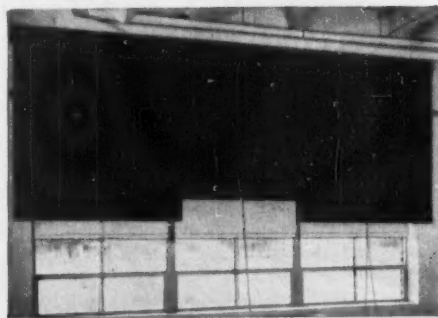
The most popular type and size MONROE Deluxe Folding Pedestal Banquet or School Cafeteria table is our No. 3 (30 x 96 inches). This table is available with ORNACEL tops as low as \$44.85 less a 33 1/3% discount when ordered in lots of 12 or more. Tables are also available with adjustable height pedestals for use in the Kindergarten at 20 inches up, or in emergencies for adult dinners at standard 30 inches.

Write for Catalog and Discounts

## THE Monroe COMPANY

76 CHURCH STREET      COLFAX, IOWA

## FOR YOUR WIDE WINDOWS



PATENTED

The Draper X-L unit shown above provides for windows of unlimited width



Shades are mounted to a heavy gauge steel shield

**THERE IS A DRAPER DARKENING SHADE FOR WINDOWS OF ANY TYPE OR SIZE**

**X-L**—For extremely wide and multiple windows.

**PAKFOLD**—One set of demountable shades may be moved from room to room.

**LITE-LOCK**—Roller box and side channel equipment for laboratory installations.

**SKYLIGHT**—A rugged and efficient unit.

**WRITE TODAY** for our latest 20 pg. catalog, "Correctly Controlled Daylight" — with cloth samples, etc.

Offset brackets give shades 6" overlap

**LUTHER O. DRAPER SHADE CO.**

P.O. Box 418

Spiceland, Indiana

## THE FIRST REALLY COMPLETE

### School Instrument Line

Everything you need in both instruments and exclusive teaching helps—to develop the school instrumental music program from Kindergarten to College! Here's the one *really complete* line of school band and orchestra instruments—wind, string and percussion, as well as Rhythm Band, Advanced Rhythm Band and Song Flute—all of *guaranteed quality* under *one* name. Need help with your band and orchestra organizing problems? Write us! Mail coupon for helpful literature.



from KINDERGARTEN to COLLEGE

MAIL COUPON  
FOR THIS BOOKLET  
AND OTHER FREE LITERATURE



**PAN-AMERICAN**  
BAND INSTRUMENTS  
Division of C. G. CONN LTD.  
ELKHART, INDIANA

Especially important to School Administrators is this free 12-page booklet, "Music, and the Basic Objectives of Education." Send for it without obligation.

PAN-AMERICAN BAND INSTRUMENTS, ELKHART, INDIANA, DEPT. 1153

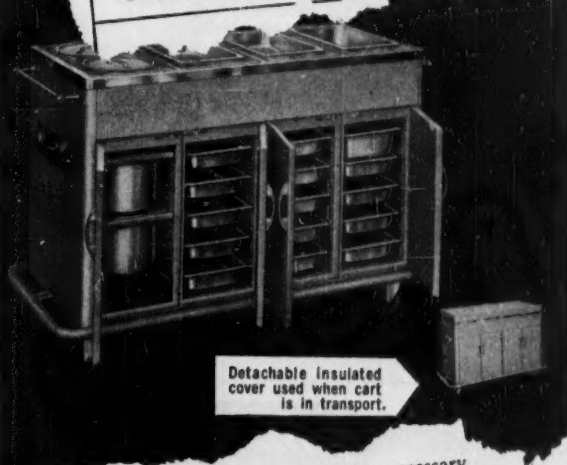
- |                                                         |                                                    |                                                  |
|---------------------------------------------------------|----------------------------------------------------|--------------------------------------------------|
| <input type="checkbox"/> Music, and Basic Objectives    | <input type="checkbox"/> String Instrument Catalog | <input type="checkbox"/> Wind Instrument Catalog |
| <input type="checkbox"/> Rhythm Band Instrument Catalog | Name _____ Title _____                             |                                                  |
| <input type="checkbox"/> Percussion Instrument Catalog  | Address _____                                      |                                                  |
| <input type="checkbox"/> New Educational Aids Catalog   | City _____ Co. _____ State _____                   |                                                  |
|                                                         | School _____                                       |                                                  |

## LOST AND FOUND

LOST... Several School Kitchens and Cafeterias

FOUND... NACO Portable Electric Food Cart with Full-Course Meals for 300 Hungry Students

SAVED... Thousands of Important School-Budget Dollars



Detachable insulated cover used when cart is in transport.

Kitchens and cafeterias are no longer necessary in today's modern school. One central school kitchen prepares meals for all the other schools at much lower cost... sends them back by truck in the NACO Portable Cart. Just plug NACO in an electric outlet and serve... right in the gymnasium or auditorium. About 300 Oven-Hot meals are kept in three, insulated, "hot compartments." Salads and other "cool foods" may be refrigerated with ice, dry ice, or kept at room temperature. Holds 18 serving pans or 18 fireless cooker pans in hot section and 6 pans in cool section. NACO Portable Cart is designed to fit into a serving line.

Write for full information and cost analysis of this plan and names of schools now successfully using NACO Carts.

### NACO PORTABLE FOOD CARTS...

Lower costs  
Hot meals  
Dry heat  
Less food waste  
Insulated sections  
Special "cool" section

300 meal capacity  
Easy to clean  
Less Maintenance expense  
Portability—just roll in  
No special wiring  
Sectional heat regulators

**ATLAS** Division

National Cornice Works  
1323 Channing St. • Los Angeles 21, Calif.  
Export Division: 301 Clay St., San Francisco, Calif.



## What's New ...

### Product Literature

• The new 1954 Catalog No. 135 issued by Allied Radio Corporation, 100 N. Western Ave., Chicago 80, lists over 20,000 items in 268 pages. It features a large selection of radio, television and electronics parts and equipment for use in schools, classrooms, laboratories and shops. Of interest to school officials and instructors is the wide selection of training kits, test equipment, books and diagrams, parts and tubes and other equipment required for radio and electronic training activities. (Key No. 803)

• "Midland Maintenance and Sanitation Products" are described in a new catalog issued by Midland Laboratories, Dubuque, Iowa. The catalog is indexed and includes descriptive information and uses of soaps, seals, finishes, removers, waxes, disinfectants, deodorants, insecticides and sprayers, dishwashing aids, floor machines and other maintenance equipment and supplies. (Key No. 804)

• Catalog 98, issued by Kewanee-Ross Corporation, Kewanee, Ill., contains full descriptive information on the M-800 Series Boilers for high and low pressures, designed for oil or gas firing. Quality features of the boilers with detailed listings of ratings, standard equipment and trim are included. (Key No. 805)

• "No One Ever Regretted Buying Quality" is the heading at the top of the new catalog, "Peabody Plus Value," released by The Peabody Seating Company, Inc., North Manchester, Ind. In addition to illustrations and descriptive text on the various items of school furniture offered by the company, each section carries illustrations and description of the "plus values" or special structural features of the product. Included is information on movable desk units, school seats, tables, chairs, and auditorium seating, as well as folding chairs. Key No. 806)

• A new instruction folder on resurfacing old wooden desk tops with durable, maintenance-free plastic, has been prepared by Roddis Plywood Corporation, Marshfield, Wis. Under the title "Instructions for Fabricating Textolite School Desk Tops," the folder gives complete directions for schools interested in making this work an industrial arts project. Instructions are easy to follow and contain diagrams illustrating various steps in the resurfacing procedure. Any school shop will supply the simple equipment needed to apply this high-pressure, decorative plastic laminate which is manufactured by the General Electric Company and distributed nationally by Roddis. (Key No. 807)

• How time can be saved in a high school and accuracy and legibility of records and reports improved by using IBM accounting machines for registration, programming and preparation of various reports is described in a new booklet, "High School Student Registration," issued by International Business Machines Corp., 590 Madison Ave., New York 22. The booklet outlines the counseling and programming system of a western school using the equipment and explains the procedures followed in the machine preparation of forms and reports. The booklet, Application Report No. 85, is illustrated. (Key No. 808)

• An attractive new catalog of Stage Equipment has been published by the Great Western Stage Equipment Co., 1524 Grand Ave., Kansas City 6, Mo. The 1953 catalog presents a guide to planning a new stage, with drawings. This is followed by catalog information and photographs of the complete line of stage equipment manufactured by the company, including stage and auditorium window curtains, drapery and asbestos curtains, seat cushions, interior and exterior scenery, settings and flats, water colors, spotlights and other stage lighting and dimmers, stage hardware and rigging, and miscellaneous equipment. (Key No. 809)

(Continued on page 168)

### *Krueger's Ahead*

#### WITH THE FINEST TUBULAR CHAIR EVER!



More durable — and more comfortable than many folding chairs costing twice as much, Krueger tubular steel chairs boast: —

- Seamless tube frames
- Electrically welded and riveted construction
- Die-formed leg stretchers
- Curved rolled edge backrest
- Positive, non-pinching seat lock
- Silent folding operation
- Y-type non-tipping frame
- Baked-on enamel finish

**FEATURES THAT MEAN MORE!**




No. 62, with curved hardwood veneer seat for indoors and No. 61, with perforated, curved steel seat for outdoor use, provide you with super quality seating that is sturdily built to last for years. Light in weight, quick and quiet folding, easy to carry and more.

**WRITE FOR CATALOG**

... Describing the complete Krueger line of steel tubular and channel frame folding chairs.

## KRUEGER

**METAL PRODUCTS • GREEN BAY • WISCONSIN**

Vertical steel bracing bars within tubular legs provide extra strength, rigidity to rivets, hinges, mechanism. Steel dome feet for smooth gliding can also be covered with non-slip white rubber feet.



## *Framed . . .*

### FOR PERFORMANCE

The BOSTON KS Sharpener after producing 36,890 pencil points was still operative in test conducted by Tinius Olsen Co., Willow Grove, Pa. Again proof of the durability, speed and economy of this famous sharpener. Have our representative show you the complete details of this pencil sharpener test 31517.

**BUY BOSTONS . . .**  
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## BOSTON

PENCIL SHARPENERS



make one permanent\* investment  
... forget about replacements.

## STACOR 4-POST DRAWING TABLE



### LIFETIME STEEL CONSTRUCTION

Rigid welded steel construction assures amazing durability under the heaviest use • table top adjusts to comfortable working angle • selected soft wood top • hard baked gray hammer-tone enamel finish • 8 board sizes, 2 heights

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INQUIRIES  
INVITED

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Manufacturers of Lifetime Steel Blue Print Filing Cabinets, Drafting Tables, Tracing Tables, Etc. Write today for catalog  
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## Vallen CURTAIN CONTROLS AND TRACKS

### TRIPLE THE LIFE OF CURTAINS AND EQUIPMENT WITH THE VALLEN JUNIOR

- Noiseless, Compact, Safe
- Simple to install
- Controlled by Vallen's exclusive one-button Start, Stop and Reverse Control
- Allows manual operation

WE'RE HEADQUARTERS FOR  
YOUR PROBLEMS

There is a Vallen  
Electric Control  
and Track for every  
need.



VALLEN JUNIOR

**VALLEN, INC. AKRON 4, OHIO**



## STRETCH YOUR SCHOOL LUNCH BUDGET DOLLAR WITH "AerVOID" HOT FOOD, SOUP AND LIQUID CARRIERS

Present-day costs of kitchen equipment and labor for every school in a school system quickly play havoc with school lunch budgets.



The answer is "More centralized food production," saving the expense of duplicating food production setups in a number of locations.

Centralized production and distribution of hot foods and liquids is today "established practice," made so by AerVOID vacuum insulated hot food and liquid carriers which provide a practical and economical means for serving a number of different schools with hot foods from one centralized location.

You can't raise the cost of meals to the children, but you can "stretch your budget dollars" with AerVOIDs. Our food consultants will help you with suggestions without cost.

Circular NS-53 tells exactly how one city's schools saves money with AerVOIDs. Write for your copy today. No obligation.

## Vacuum Can Company

19 South Hoyne Avenue Chicago 12, Illinois

Hot Liquids



**VACUUM  
INSULATED**

Hot Foods  
and Soup



## What's New ...

- A digest of the many uses of the Time Switch is offered in a booklet, **"The Story of the Electric Watchman,"** offered by the National Electrical Manufacturers Assn., Time Switch Section, 155 E. 44th St., New York 17. The booklet describes Time Switches as a factor in the lives of all types of people and tells why and how. (Key No. 810)
- A booklet, **"Some Whys and Hows of Modern School Lighting,"** written in non-technical language by Willard Allphin, specialist in school lighting, is being made available by Sylvania Electric Products Inc., 1740 Broadway, New York 19. The booklet stresses the fact that 80 percent of all school learning is gained through the eyes and the resulting importance of good lighting. The results of studies are discussed, including the relative values of various types of lighting. Of interest are "before and after" photographs of modernized classrooms, showing the value of proper lighting. (Key No. 811)
- The fall **Stylebook of Girls Gym Suits** manufactured by E. R. Moore Co., 932 W. Dakin St., Chicago 13, is now available. All popular Moore styles are shown in the 16 page Stylebook in full color. Actual swatches of materials used are included and the color choice is illustrated by the device of miniature suits and shorts. (Key No. 812)
- **"Food Service Facilities"** is the title of a planning booklet issued by J. E. Stephens Associates, Inc., 320 Lafayette Blvd., Detroit 26, Mich. Twenty-four pages of sketches and photographs show carefully planned facilities for the storage, preparation and serving of food for up to 5000 persons. In some instances, overall sizes of the area and the number of persons served are stated, with the thought that this information might prove helpful in the first preliminary planning of space requirements. J. E. Stephens Associates do not sell equipment but offers a complete Engineering Service for planning. (Key No. 813)
- A fact sheet designed for the junior high and high school student who is contemplating specializing in the field of dietetics has been prepared by The American Dietetic Association, 620 N. Michigan Ave., Chicago 11. Entitled **"Chart Your Course Toward Dietetics,"** the folder gives helpful vocational guidance data for this field. (Key No. 814)
- A revised catalog covering the application of **Stanley Magic Door Controls** to the automatic operation of doors is discussed in a revised catalog issued by the Magic Door Division, The Stanley Works, 195 Lake St., New Britain, Conn. Magic Door Controls are described in detail and illustrations show them in use. (Key No. 815)
- The new **Pictorial 48 page Catalog** issued by The George F. Cram Company, 730 E. Washington St., Indianapolis, Ind., illustrates and describes its full line of globes, maps, charts and atlases. The book is illustrated in full colors. Cram maps and globes are realistically graded to fit the mental maturity of students in various age groups, thus making it possible to create greater student interest with more gratifying results in the classroom. (Key No. 816)
- A new idea for kindergartens, nursery schools and first grade children is described in a folder on the **"Wee Wadsworth Child's Playhouse."** The house is large enough for small children to play in. It comes in six pre-cut parts which can be assembled in approximately two hours. It is a sturdy, permanent little house which can be set up inside, or on the playground as it withstands weather. It is wired for heating and lighting, has a chimney, wood shutters, shingled roof, trellis and flower planter and is painted white. Full description, with dimensions, is given in the folder which is available from Wadsworth Homes, Inc., 2949 Chrysler Rd., Kansas City, Kans. (Key No. 817)

## Film Releases

**"BEVA Penmanship Series,"** 2 sets, 27 filmstrips each, for elementary schools: Set I, small letters of the alphabet; Set II, capital letters and figures. **BEVA, Sandy Hook, Conn.** (Key No. 818)

**"Music: Career or Hobby,"** "Student Government at Work," "Building Better Paragraphs," "Our Big, Round World," all 16 mm. one reel sound films, in color or black and white. **"Atomic Research: Areas and Development,"** 16 mm. sound film, black and white, 1 1/4 reels. **Coronet Films, 65 E. South Water St., Chicago 1.** (Key No. 819)

**"Weighing With the Analytical Balance,"** teachers' training and science classes, 18 minutes, black and white. **"Prehistoric Life,"** series of 6 color filmstrips for middle grade science classes; **"Audubons Birds of America,"** series of 6 filmstrips in color, for middle grades and junior high school, and **"The Country Community,"** series of 6 filmstrips in color for middle grades. **Encyclopaedia Britannica Films Inc., 1150 Wilmette Ave., Wilmette, Ill.** (Key No. 820)

**"The French Union in Films,"** series of 16 mm. films showing North Africa, Central and West Africa, Madagascar, Indochina and the Pacific Islands. **Franco-American Audio-Visual Distribution Center, Inc., 972 Fifth Ave., New York 21.** (Key No. 821)

**"Music Stories,"** series of six filmstrips on "Peter and the Wolf," "Hansel and Gretel," "The Nutcracker," "Peer Gynt,"

**"The Firebird"** and **"The Sorcerer's Apprentice,"** sound, all in full color. **The Jam Handy Organization, 2821 E. Grand Blvd., Detroit 11, Mich.** (Key No. 822)

**"It's Only Beginning,"** 16 mm. color, industrial research economics film with both live action and cartooning. **Director of Public Information, Scientific Apparatus Makers Association, 20 N. Wacker Dr., Chicago 6.** (Key No. 823)

**Geography Filmstrip Series** in color, on The Northeastern United States: **"Living in New England,"** 51 frames; **"Five Great Cities,"** 47 frames; **"Valley Region of the Northeast,"** 47 frames, and **"Where East and South Meet,"** 51 frames. **Children's Fairy Tales Series:** **"Cinderella,"** "Snow White and the Seven Dwarfs," "Jack and the Beanstalk," "Sleeping Beauty," "The Little Engine That Could" and "Rackety Rabbit and the Runaway Easter Eggs," all in color, each averaging 36 frames. **Society for Visual Education, Inc., 1345 W. Diversey Parkway, Chicago 14.** (Key No. 824)

**"Your Cleanliness,"** "A Citizen Participates," 2 1/2 reels; **"A Man Without a Country,"** 2 1/2 reels; **"Venice,"** 2 1/2 reels; **"Japanese Fishing Village,"** 1 1/4 reels; **"Your Food,"** 1 1/4 reels. **"Julius Caesar Series,"** 2 filmstrips; **"American Trees,"** 4 color filmstrips; **"Mass Communication Series,"** 4 color filmstrips; **"Golden Book Set No. 6,"** 8 color filmstrips; and **"Elementary Science Set No. 4,"** 6 color filmstrips. **Young America Films, Inc., 18 E. 41 St., New York 17.** (Key No. 825)

## Suppliers' News

**Binney & Smith Co.,** manufacturers of Crayola Crayon and other Gold Medal products for art education, announces removal of its offices from 41 E. 42nd St. to 380 Madison Ave., New York 17.

**Superior Coach Corporation, Lima, Ohio,** manufacturer of school coaches, announces the opening of a new plant in **Oakland, Calif.** This new Western Division plant will be the major parts and service depot for the company's products in the Western States.

**U. S. Fire Protection Engineering Service, Inc., 805 Baltimore Ave., Kansas City, Mo.,** has been established by a group of experienced fire prevention and fire protection engineers to assist in the economical solving of the serious problems of safeguarding life and property from fire destruction. The company has no connection with any insurance company, equipment manufacturer, or construction contractor, according to its report, but has set up an engineering staff to serve in a consulting capacity.





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## USE THESE CARDS

(We pay the postage)



*These cards are detachable and are provided for the convenience of our subscribers, and those to whom they pass their copies, in obtaining information on products and services advertised in this issue or described in the "What's New" Section. See reverse side.*

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CHICAGO, ILL.

BUSINESS REPLY CARD  
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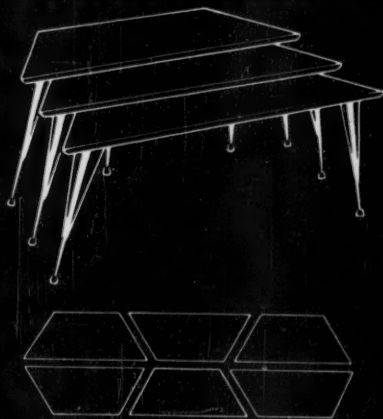
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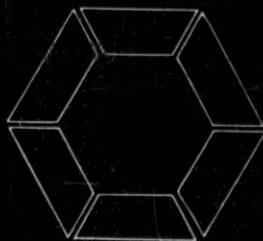
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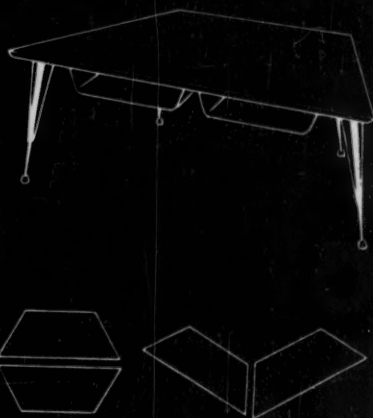
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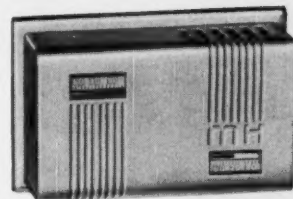
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